

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, D.C. 20426

February 29,

2000

To: Fitchburg Gas and Electric Light  
Company

Docket No.  
ER00-1215-000

Pursuant to authority delegated to the Deputy Director, Office of Markets, Tariffs and Rates, under 18 C.F.R. 375.307, your submittal in the above referenced docket(s) is accepted for filing. Your rate schedule designations are shown on the Enclosure.

Under 18 C.F.R. 385.210, interventions are timely if made within the time prescribed by the Secretary. Under 18 C.F.R. 385.214, the filing of a timely motion to intervene makes the movant a party to the proceeding, if no answer in opposition is filed within fifteen days. The filing of a timely notice of intervention makes a State Commission a party to the proceeding.

This action does not constitute approval of any service, rate, charge, classification, or any rule, regulation, contract, or practice affecting such rate or service provided for in the filed documents; nor shall such action be deemed as recognition of any claimed contractual right or obligation affecting or relating to such service or rate; and such action is without prejudice to any findings or orders which have been or may hereafter be made by the Commission in any proceeding now pending or hereafter instituted by or against any of the applicant(s).

This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. 385.713.

Sincerely,

Shelton M. Cannon, Deputy Director  
Office of Markets, Tariffs and

Rates

Enclosure

Fitchburg Gas and Electric Light Company  
Docket No. ER00-1215-000  
Rate Schedule Designations

Designation	Description/
Effective date	
(1) Third Revised Sheet Nos.	Revised Tariff
135, 137, and 174 under	Sheets under
FERC Electric Tariff,	Period One/
First Revised Volume No. 4	March 1, 1998
(Supersedes Second Revised	
Sheet Nos. 135, 137, and 174	
under FERC Electric Tariff,	
First Revised Volume No. 4	
(2) Fourth Revised Sheet Nos.	Revised Tariff
135, 137, and 174 under	Sheets under
FERC Electric Tariff,	Period Two/
First Revised Volume No. 4	June 1, 1999
(Supersedes Third Revised	
Sheet Nos. 135, 137, and 174	
under FERC Electric Tariff,	
First Revised Volume No. 4)	

ORIGINAL



Unitil Service Corp.

FILED  
OFFICE OF THE SECRETARY

00 JAN 24 PM 3: 12

FEDERAL ENERGY  
REGULATORY  
COMMISSION

January 21, 2000

Mr. David P. Boergers  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, DC 20426

ER00-1215-000

RE: Fitchburg Gas and Electric Light Company  
Docket No. ER00 - 1215 - 000  
Revisions to Open Access Transmission Tariff Rates

Dear Secretary Boergers:

Fitchburg Gas and Electric Light Company ("FG&E" or the "Company"), hereby submits for approval by the Federal Energy Regulatory Commission ("Commission" or the "FERC") changes to its rates under its Open Access Transmission Tariff, FERC Electric Tariff, First Revised Volume No. 4. As explained below, FG&E is submitting two sets of changes, one covering the period beginning March 1, 1998 and ending May 31, 1999 ("Period 1"), and one effective June 1, 1999 and forward ("Period 2"). The Period 1 adjustment reflects a rate reduction of \$508,159 compared to FG&E's currently effective rates. The Period 2 adjustment reflects a rate reduction of \$79,992. These rate changes are a result of the reclassification of FG&E's transmission and distribution facilities approved by FERC and discussed in detail in Section 5 of this filing. Accordingly, FG&E is submitting this filing pursuant to the abbreviated filing requirements in 18 C.F.R. § 35.13 (a) (2) (iii).

FERC DOCKETED

In accordance with 18 C.F.R. § 35.13, FG&E submits the following information:

JAN 24 2000

AT

1. List of Documents Submitted

Six copies of the following documents are being submitted for filing:

- This transmittal letter, dated January 21, 2000
- Revised Tariff sheets (Attachment A)
- Redlined Tariff sheets (Attachment B)
- A list of names and addresses of the person to whom this filing has been sent (Attachment C)
- A statement showing the rate calculations (Attachments D and E)

Karen M. Asbury  
Manager Regulatory  
Services

6 Liberty Lane West  
Hampton, NH 03842-  
1720

Phone: 603-773-6441  
Fax: 603-773-6641  
Email:

000128-0119 -1

Mr. David P. Boergers  
November 15, 1999  
Page 2

- A form of notice suitable for publication in the Federal Register (Attachment F)
- A table showing the sales and services and revenues from sales and services under the rate schedule to be superseded and under the rate schedule change. (Attachment G)

In addition, an electronic copy of FG&E's revised tariff sheets and a redlined version are enclosed in WordPerfect 6.1 format. A separate diskette containing a copy of the Notice of Filing in WordPerfect 6.1 format is also enclosed.

2. Proposed Effective Date

FG&E requests that the proposed changes for Period 1 be made effective March 1, 1998, and June 1, 1999 for Period 2. FG&E therefore respectfully requests that the Commission waive the 60-day notice requirement in Section 35.3 of the Commission's regulations, 18 C.F.R. § 35.3(a), consistent with its policy of granting waivers of the 60-day notice requirement for rate decreases, New York State Elec. & Gas Coop., 79 FERC ¶ 61,307, at 62,370 (1997); Central Hudson Gas & Elec. Corp. 60 FERC ¶ 61,106, at 61,338, reh'g denied, 61 FERC ¶ 61,089 (1992), and its approval of rate decreases on a retroactive basis, see, e.g., Glen Park Associates Ltd. Partnership, 85 FERC ¶ 61,010, 1998 FERC LEXIS 1948, at \*10 (1998); New York State Elec. & Gas Coop., 79 FERC ¶ 61,307, at 62,370.

Period 1: The following tariff sheets incorporate the rate reductions proposed for effect March 1, 1998 through May 31, 1999:

Third Revised Sheet No. 135, Supersedes Second Revised Sheet No. 135

Third Revised Sheet No. 137, Supersedes Second Revised Sheet No. 137

Third Revised Sheet No. 174, Supersedes Second Revised Sheet No. 174

Period 2: The following tariff sheets incorporate the rate reductions proposed for effect June 1, 1999:

Fourth Revised Sheet No. 135, Supersedes Third Revised Sheet No. 135

Fourth Revised Sheet No. 137, Supersedes Third Revised Sheet No. 137

Mr. David P. Boergers  
November 15, 1999  
Page 3

Fourth Revised Sheet No. 174, Supersedes Third Revised Sheet No. 174

Attachment A provides the proposed tariffs. Attachment B provides the redlined versions of the tariffs.

3. Persons to Whom This Filing Has Been Sent  
A copy of this filing has been sent to all parties listed on the official service list in Docket No. OA97-6-000, FG&E's original Open Access Docket, all parties in Docket No. OA97-635 and customers. This filing has also been sent to the Massachusetts Department of Telecommunications and Energy ("MDTE"). See Attachment C.
4. Description of Filing  
Attachment D provides the supporting documentation for the proposed Period 1 rates. This rate change reflects the Non-Pool Transmission Facilities plant as approved by the MDTE and FERC, as described in Section 5. Statement of Reasons for Change below.

Attachment E provides the supporting documentation for the proposed Period 2 rates. This rate change reflects the non-Pool Transmission Facilities plant effective June 1, 1999, as described in Section 5. Statement of Reasons for Change below. The proposed effective date matches the date that the offsetting Pool Transmission Facilities changes took effect under NEPOOL's Open Access Transmission Tariff.

Both sets of rates were calculated using the same formula that was approved by FERC for Pool Transmission Facilities in New England Power Pool, 88 FERC ¶ 61,140 (1999). FG&E used the same return on equity of 11.50% employed in deriving its current Open Access rates, approved effective May 13, 1997<sup>1</sup>. This is also the same return on equity that FG&E includes in its revenue requirement calculation for Pool Transmission Facilities.

As mentioned above, these changes reflect retroactive rate decreases from the rates currently in effect. The changes are summarized as follows:

Annual Transmission Revenue Requirement for Network Integration  
Transmission Service per Tariff Sheet No. 174:

<sup>1</sup> Bangor Hydro Electric Company, Docket No. OA96-191-002, et al.

Mr. David P. Boergers  
November 15, 1999  
Page 4

Effective May 13, 1997: \$624, 122

Period 1 Adjustment, March 1, 1998 = (\$508,159) resulting in a  
revenue requirement of \$115,963

Period 2 Adjustment, June 1, 1999 = (\$79,992) resulting in a revenue  
requirement of \$544,130

These revenue requirements are used to determine the point-to-point  
rates set forth on Tariff Sheets No. 135 and 137. See Summary of  
Rates included as the first page of Attachments D and E.

5. Statement of Reasons for Change

FG&E's Open Access rates currently on file reflect the costs of  
FG&E's Non-Pool Transmission Facilities based on 1995 calendar  
year data, effective May 13, 1997. These rates are based on 1995  
Transmission Plant, as recorded in FERC Form I (\$8,692,112), less  
1995 Pool Transmission Facilities plant.<sup>2</sup>

On December 31, 1997, FG&E filed its Electric Restructuring Plan  
with the MDTE as required by the Act Relative to Restructuring the  
Electric Utility Industry in the Commonwealth, Regulating the  
Provision of Electricity and Other Services, and Promoting Enhanced  
Consumer Protections Therein<sup>3</sup>. As part of that plan, FG&E filed  
unbundled transmission and distribution rates, which were based  
upon a reclassification of transmission and distribution facilities in  
accordance with the FERC's seven-part test contained in FERC  
Order No. 888. This determination indicated a reclassification of  
certain Transmission Plant to Distribution Plant, specifically,  
\$3,475,116 out of total transmission of \$8,692,112, using 1995 data.

FG&E received interim approval of its Restructuring Plan by the  
MDTE on February 26, 1998, resulting in unbundled transmission  
and distribution rates effective March 1, 1998<sup>4</sup>. On April 13, 1998,  
FG&E received MDTE approval of its reclassification<sup>5</sup>. On that same  
day, the MDTE sent a letter to FERC requesting that FERC grant  
deference to the MDTE's findings regarding the local distribution

<sup>2</sup> Costs associated with FG&E's Pool Transmission Facilities are covered under the NEPOOL Open  
Access Transmission Tariff.

<sup>3</sup> MDTE Docket No. 97-115 (December 31, 1997).

<sup>4</sup> MDTE Docket No. 97-115 (February 26, 1998).

<sup>5</sup> MDTE Docket No. 97-93 Investigation by the Department into the Classification of Transmission  
and Distribution Facilities (April 13, 1998).

Mr. David P. Boergers  
November 15, 1999  
Page 5

facility classification of each electric company in Massachusetts. On July 29, 1998 in Docket No. EL98-42,000, FERC granted the petition for declaratory order that, on the facts presented, certain facilities, as identified in the pleadings, are State-jurisdictional local distribution facilities and other facilities, as identified in the pleadings, are Commission-jurisdictional transmission facilities, The Massachusetts Department of Telecommunications and Energy, 84 FERC ¶ 61,090 (1998). FG&E received final MDTE approval of its electric restructuring plan on January 15, 1999<sup>6</sup>. The Period 1 rate reduction is necessary so that FG&E's Open Access rates reflect the reclassification of Transmission Plant to Distribution plant as approved by the MDTE effective March 1, 1998 and accepted by FERC.

Effective June 1, 1999, the revenue requirement included in NEPOOL's Open Access Transmission for FG&E's Pool Transmission Facilities was reduced to reflect a reclassification of certain Pool Transmission Facilities to Non-Pool Transmission Facilities. This was due in part to a NEPOOL definitional change of what constitutes Pool Transmission Facilities and in part due to an operational change that caused certain FG&E facilities to no longer qualify as Pool Transmission Facilities. These changes reduced FG&E's Pool Transmission Facilities Plant investment, thereby increasing by the same amount, FG&E's Non-Pool Transmission Facilities Plant investment. The lower Pool Transmission Facilities revenue requirement was reflected in NEPOOL's Open Access Transmission Tariff effective June 1, 1999. The Period 2 rate reduction is necessary so that FG&E's Open Access rates reflect the appropriate level of Non-Pool Transmission Facilities, as reclassified.

6. Showing of Requisite Agreements  
No agreements were necessary to file these changes.
7. Costs Adjudged Illegal, Duplicative, or Unnecessary  
None of the costs reflected in these charges has been alleged or judged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory employment practices.
8. Form of Notice Suitable for Publication in the Federal Register  
Attachment F is a draft Notice of Filing suitable for publication in the Federal Register.

<sup>6</sup> MDTE Docket No. 97-115/98-120 (January 15, 1999)

Mr. David P. Boergers  
November 15, 1999  
Page 6

9. Effect of the Rate Change on Customers  
FG&E has one customer currently taking service under its tariff. In 1998 and 1999, FG&E imputed revenues for its own use of its system. Attachment G is a table showing the sales and services and revenues from sales and services under the rate schedule to be superseded and under the rate schedule change. FG&E intends to issue refunds and file the required refund report by the date determined by the Commission.

Correspondence or communications with respect to this filing may be addressed to the following persons:

Karen M. Asbury  
Manager of Regulatory Services  
Unitil Service Corp.  
6 Liberty Lane West  
Hampton, NH 03842-1720  
(603) 773-6441

Andrea J. Chambers  
LeBoeuf, Lamb, Greene, & MacRae  
1875 Connecticut Avenue, NW  
Washington, DC 20009-5728  
(202) 986-8000  
Attorney for Fitchburg Gas and Electric Light Company

Please date stamp and return the enclosed extra copy of the cover letter to this filing and return to me. Thank you for your attention to this matter.

Sincerely,

Karen M. Asbury  
Manager Regulatory Services

Enclosures





FILED  
OFFICE OF THE SECRETARY  
00 JAN 24 PM 3:13  
FEDERAL ENERGY  
REGULATORY  
COMMISSION

January 21, 2000

Mr. David P. Boergers  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, DC 20426

RE: Fitchburg Gas and Electric Light Company  
Docket No. ER00 -  
Revisions to Open Access Transmission Tariff Rates

Dear Secretary Boergers:

Fitchburg Gas and Electric Light Company ("FG&E" or the "Company"), hereby submits for approval by the Federal Energy Regulatory Commission ("Commission" or the "FERC") changes to its rates under its Open Access Transmission Tariff, FERC Electric Tariff, First Revised Volume No. 4. As explained below, FG&E is submitting two sets of changes, one covering the period beginning March 1, 1998 and ending May 31, 1999 ("Period 1"), and one effective June 1, 1999 and forward ("Period 2"). The Period 1 adjustment reflects a rate reduction of \$508,159 compared to FG&E's currently effective rates. The Period 2 adjustment reflects a rate reduction of \$79,992. These rate changes are a result of the reclassification of FG&E's transmission and distribution facilities approved by FERC and discussed in detail in Section 5 of this filing. Accordingly, FG&E is submitting this filing pursuant to the abbreviated filing requirements in 18 C.F.R. § 35.13 (a) (2) (iii).

In accordance with 18 C.F.R. § 35.13, FG&E submits the following information:

1. List of Documents Submitted  
Six copies of the following documents are being submitted for filing:
  - This transmittal letter, dated January 21, 2000
  - Revised Tariff sheets (Attachment A)
  - Redlined Tariff sheets (Attachment B)
  - A list of names and addresses of the person to whom this filing has been sent (Attachment C)
  - A statement showing the rate calculations (Attachments D and E)

Karen M. Asbury  
Manager Regulatory  
Services

6 Liberty Lane West  
Hampton, NH 03842-  
1720

Phone: 603-773-6441  
Fax: 603-773-6641  
Email:

Mr. David P. Boergers  
November 15, 1999  
Page 2

- A form of notice suitable for publication in the Federal Register (Attachment F)
- A table showing the sales and services and revenues from sales and services under the rate schedule to be superseded and under the rate schedule change. (Attachment G)

In addition, an electronic copy of FG&E's revised tariff sheets and a redlined version are enclosed in WordPerfect 6.1 format. A separate diskette containing a copy of the Notice of Filing in WordPerfect 6.1 format is also enclosed.

2. Proposed Effective Date

FG&E requests that the proposed changes for Period 1 be made effective March 1, 1998, and June 1, 1999 for Period 2. FG&E therefore respectfully requests that the Commission waive the 60-day notice requirement in Section 35.3 of the Commission's regulations, 18 C.F.R. § 35.3(a), consistent with its policy of granting waivers of the 60-day notice requirement for rate decreases, New York State Elec. & Gas Coop., 79 FERC ¶ 61,307, at 62,370 (1997); Central Hudson Gas & Elec. Corp. 60 FERC ¶ 61,106, at 61,338, reh'g denied, 61 FERC ¶ 61,089 (1992), and its approval of rate decreases on a retroactive basis, see, e.g., Glen Park Associates Ltd. Partnership, 85 FERC ¶ 61,010, 1998 FERC LEXIS 1948, at \*10 (1998); New York State Elec. & Gas Coop., 79 FERC ¶ 61,307, at 62,370.

Period 1: The following tariff sheets incorporate the rate reductions proposed for effect March 1, 1998 through May 31, 1999:

Third Revised Sheet No. 135, Supersedes Second Revised Sheet No. 135

Third Revised Sheet No. 137, Supersedes Second Revised Sheet No. 137

Third Revised Sheet No. 174, Supersedes Second Revised Sheet No. 174

Period 2: The following tariff sheets incorporate the rate reductions proposed for effect June 1, 1999:

Fourth Revised Sheet No. 135, Supersedes Third Revised Sheet No. 135

Fourth Revised Sheet No. 137, Supersedes Third Revised Sheet No. 137

Mr. David P. Boergers  
November 15, 1999  
Page 3

Fourth Revised Sheet No. 174, Supersedes Third Revised Sheet No. 174

Attachment A provides the proposed tariffs. Attachment B provides the redlined versions of the tariffs.

3. Persons to Whom This Filing Has Been Sent

A copy of this filing has been sent to all parties listed on the official service list in Docket No. OA97-6-000, FG&E's original Open Access Docket, all parties in Docket No. OA97-635 and customers. This filing has also been sent to the Massachusetts Department of Telecommunications and Energy ("MDTE"). See Attachment C.

4. Description of Filing

Attachment D provides the supporting documentation for the proposed Period 1 rates. This rate change reflects the Non-Pool Transmission Facilities plant as approved by the MDTE and FERC, as described in Section 5. Statement of Reasons for Change below.

Attachment E provides the supporting documentation for the proposed Period 2 rates. This rate change reflects the non-Pool Transmission Facilities plant effective June 1, 1999, as described in Section 5. Statement of Reasons for Change below. The proposed effective date matches the date that the offsetting Pool Transmission Facilities changes took effect under NEPOOL's Open Access Transmission Tariff.

Both sets of rates were calculated using the same formula that was approved by FERC for Pool Transmission Facilities in New England Power Pool, 88 FERC ¶ 61,140 (1999). FG&E used the same return on equity of 11.50% employed in deriving its current Open Access rates, approved effective May 13, 1997<sup>1</sup>. This is also the same return on equity that FG&E includes in its revenue requirement calculation for Pool Transmission Facilities.

As mentioned above, these changes reflect retroactive rate decreases from the rates currently in effect. The changes are summarized as follows:

Annual Transmission Revenue Requirement for Network Integration  
Transmission Service per Tariff Sheet No. 174:

<sup>1</sup> Bangor Hydro Electric Company, Docket No. OA96-191-002, et al.

Mr. David P. Boergers  
November 15, 1999  
Page 4

Effective May 13, 1997: \$624, 122

Period 1 Adjustment, March 1, 1998 = (\$508,159) resulting in a revenue requirement of \$115,963

Period 2 Adjustment, June 1, 1999 = (\$79,992) resulting in a revenue requirement of \$544,130

These revenue requirements are used to determine the point-to-point rates set forth on Tariff Sheets No. 135 and 137. See Summary of Rates included as the first page of Attachments D and E.

5. Statement of Reasons for Change

FG&E's Open Access rates currently on file reflect the costs of FG&E's Non-Pool Transmission Facilities based on 1995 calendar year data, effective May 13, 1997. These rates are based on 1995 Transmission Plant, as recorded in FERC Form I (\$8,692,112), less 1995 Pool Transmission Facilities plant.<sup>2</sup>

On December 31, 1997, FG&E filed its Electric Restructuring Plan with the MDTE as required by the Act Relative to Restructuring the Electric Utility Industry in the Commonwealth, Regulating the Provision of Electricity and Other Services, and Promoting Enhanced Consumer Protections Therein<sup>3</sup>. As part of that plan, FG&E filed unbundled transmission and distribution rates, which were based upon a reclassification of transmission and distribution facilities in accordance with the FERC's seven-part test contained in FERC Order No. 888. This determination indicated a reclassification of certain Transmission Plant to Distribution Plant, specifically, \$3,475,116 out of total transmission of \$8,692,112, using 1995 data.

FG&E received interim approval of its Restructuring Plan by the MDTE on February 26, 1998, resulting in unbundled transmission and distribution rates effective March 1, 1998<sup>4</sup>. On April 13, 1998, FG&E received MDTE approval of its reclassification<sup>5</sup>. On that same day, the MDTE sent a letter to FERC requesting that FERC grant deference to the MDTE's findings regarding the local distribution

<sup>2</sup> Costs associated with FG&E's Pool Transmission Facilities are covered under the NEPOOL Open Access Transmission Tariff.

<sup>3</sup> MDTE Docket No. 97-115 (December 31, 1997).

<sup>4</sup> MDTE Docket No. 97-115 (February 26, 1998).

<sup>5</sup> MDTE Docket No. 97-93 Investigation by the Department into the Classification of Transmission and Distribution Facilities (April 13, 1998).

Mr. David P. Boergers  
November 15, 1999  
Page 5

facility classification of each electric company in Massachusetts. On July 29, 1998 in Docket No. EL98-42,000, FERC granted the petition for declaratory order that, on the facts presented, certain facilities, as identified in the pleadings, are State-jurisdictional local distribution facilities and other facilities, as identified in the pleadings, are Commission-jurisdictional transmission facilities, The Massachusetts Department of Telecommunications and Energy, 84 FERC ¶ 61,090 (1998). FG&E received final MDTE approval of its electric restructuring plan on January 15, 1999<sup>6</sup>. The Period 1 rate reduction is necessary so that FG&E's Open Access rates reflect the reclassification of Transmission Plant to Distribution plant as approved by the MDTE effective March 1, 1998 and accepted by FERC.

Effective June 1, 1999, the revenue requirement included in NEPOOL's Open Access Transmission for FG&E's Pool Transmission Facilities was reduced to reflect a reclassification of certain Pool Transmission Facilities to Non-Pool Transmission Facilities. This was due in part to a NEPOOL definitional change of what constitutes Pool Transmission Facilities and in part due to an operational change that caused certain FG&E facilities to no longer qualify as Pool Transmission Facilities. These changes reduced FG&E's Pool Transmission Facilities Plant investment, thereby increasing by the same amount, FG&E's Non-Pool Transmission Facilities Plant investment. The lower Pool Transmission Facilities revenue requirement was reflected in NEPOOL's Open Access Transmission Tariff effective June 1, 1999. The Period 2 rate reduction is necessary so that FG&E's Open Access rates reflect the appropriate level of Non-Pool Transmission Facilities, as reclassified.

6. Showing of Requisite Agreements  
No agreements were necessary to file these changes.
7. Costs Adjudged Illegal, Duplicative, or Unnecessary  
None of the costs reflected in these charges has been alleged or judged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory employment practices.
8. Form of Notice Suitable for Publication in the Federal Register  
Attachment F is a draft Notice of Filing suitable for publication in the Federal Register.

<sup>6</sup> MDTE Docket No. 97-115/98-120 (January 15, 1999)

Mr. David P. Boergers  
November 15, 1999  
Page 6

9. Effect of the Rate Change on Customers  
FG&E has one customer currently taking service under its tariff. In 1998 and 1999, FG&E imputed revenues for its own use of its system. Attachment G is a table showing the sales and services and revenues from sales and services under the rate schedule to be superseded and under the rate schedule change. FG&E intends to issue refunds and file the required refund report by the date determined by the Commission.

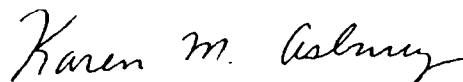
Correspondence or communications with respect to this filing may be addressed to the following persons:

Karen M. Asbury  
Manager of Regulatory Services  
Unitil Service Corp.  
6 Liberty Lane West  
Hampton, NH 03842-1720  
(603) 773-6441

Andrea J. Chambers  
LeBoeuf, Lamb, Greene, & MacRae  
1875 Connecticut Avenue, NW  
Washington, DC 20009-5728  
(202) 986-8000  
Attorney for Fitchburg Gas and Electric Light Company

Please date stamp and return the enclosed extra copy of the cover letter to this filing and return to me. Thank you for your attention to this matter.

Sincerely,



Karen M. Asbury  
Manager Regulatory Services

Enclosures

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 15 of 71

**FILED**  
**OFFICE OF THE SECRETARY**  
**00 JAN 24 PM 3:13**  
**FEDERAL ENERGY**  
**REGULATORY**  
**COMMISSION**

## Attachment A

### Revised Tariffs

Period 1:  
Effective March 1, 1998

Period 2:  
Effective June 1, 1999

Fitchburg Gas and  
Electric Light Company  
Open Access Transmission Tariff

Third Revised Sheet No. 135  
Supersedes  
Second Revised Sheet No. 135

#### **SCHEDULE 7**

##### **LONG-TERM FIRM AND SHORT-TERM FIRM POINT-TO-POINT TRANSMISSION SERVICE**

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges set forth below:

- 1) **Yearly delivery:** one-twelfth of the demand charge of \$1.567/KW of Reserved Capacity per year.
- 2) **Monthly delivery** \$0.131/KW of Reserved Capacity per month.
- 3) **Weekly delivery** \$0.030/KW of Reserved Capacity per week.
- 4) **Daily delivery** \$0.004/KW of Reserved Capacity per day.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

- 5) **Discounts:** Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an affiliate's use) must occur solely by posting on the

Effective March 1, 1998



Fitchburg Gas and  
Electric Light Company  
Open Access Transmission Tariff

Third Revised Sheet No. 137  
Supersedes  
Second Sheet No. 137

#### SCHEDULE 8

##### NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE

The Transmission Customer shall compensate the Transmission Provider for Non-Firm Point-To-Point Transmission Service up to the sum of the applicable charges set forth below:

- 1) **Monthly delivery:** \$0.098/KW of Reserved Capacity per month.
- 2) **Weekly delivery:** \$0.023/KW of Reserved Capacity per week.
- 3) **Daily delivery:** \$0.003/KW of Reserved Capacity per day.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (2) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

- 4) **Hourly delivery:** The basic charge shall be that agreed upon by the Parties at the time this service is reserved and in no event shall exceed \$0.134/MWH. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed

Effective March 1, 1998

Fitchburg Gas and Third Revised Sheet No. 174  
Electric Light Company Supersedes  
Open Access Transmission Tariff Second Revised Sheet No. 174

**ATTACHMENT H****ANNUAL TRANSMISSION REVENUE REQUIREMENT  
FOR NETWORK INTEGRATION TRANSMISSION SERVICE**

1. The Annual Transmission Revenue Requirement for purposes of the Network Integration Transmission Service shall be \$115,963.
2. The amount in (1) shall be effective until amended by the Transmission Provider or modified by the Commission.

Effective March 1, 1998

Fitchburg Gas and  
Electric Light Company  
Open Access Transmission Tariff

Fourth Revised Sheet No. 135  
Supersedes  
Third Revised Sheet No. 135

#### SCHEDULE 7

##### LONG-TERM FIRM AND SHORT-TERM FIRM POINT-TO-POINT TRANSMISSION SERVICE

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges set forth below:

- 1) **Yearly delivery:** one-twelfth of the demand charge of \$7.353/KW of Reserved Capacity per year.
- 2) **Monthly delivery** \$0.613/KW of Reserved Capacity per month.
- 3) **Weekly delivery** \$0.141/KW of Reserved Capacity per week.
- 4) **Daily delivery** \$0.02/KW of Reserved Capacity per day.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

- 5) **Discounts:** Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an affiliate's use) must occur solely by posting on the

Effective June 1, 1999

Fitchburg Gas and  
Electric Light Company  
Open Access Transmission Tariff

Fourth Revised Sheet No. 137  
Supersedes  
Third Sheet No. 137

#### SCHEDULE 8

##### NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE

The Transmission Customer shall compensate the Transmission Provider for Non-Firm Point-To-Point Transmission Service up to the sum of the applicable charges set forth below:

- 1) **Monthly delivery:** \$0.460/KW of Reserved Capacity per month.
- 2) **Weekly delivery:** \$0.106/KW of Reserved Capacity per week.
- 3) **Daily delivery:** \$0.015/KW of Reserved Capacity per day.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (2) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

- 4) **Hourly delivery:** The basic charge shall be that agreed upon by the Parties at the time this service is reserved and in no event shall exceed \$0.630/MWH. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed

Effective June 1, 1999

Fitchburg Gas and Fourth Revised Sheet No. 174  
Electric Light Company Supersedes  
Open Access Transmission Tariff Third Revised Sheet No. 174

**ATTACHMENT H**

**ANNUAL TRANSMISSION REVENUE REQUIREMENT  
FOR NETWORK INTEGRATION TRANSMISSION SERVICE**

1. The Annual Transmission Revenue Requirement for purposes of the Network Integration Transmission Service shall be \$544,130.
2. The amount in (1) shall be effective until amended by the Transmission Provider or modified by the Commission.

Effective June 1, 1999

FILED  
OFFICE OF THE SECRETARY  
00 JAN 24 PM 3: 14  
FEDERAL ENERGY  
REGULATORY  
COMMISSION

## Attachment B

### Redlined Tariffs

Period 1:  
Effective March 1, 1998

Period 2:  
Effective June 1, 1999

Fitchburg Gas and Electric Light Company  
Open Access Transmission Tariff

Third ~~Second~~ Revised Sheet No. 135  
Supersedes  
Second ~~First~~ Revised Sheet No. 135

**SCHEDULE 7****LONG-TERM FIRM AND SHORT-TERM FIRM POINT-TO-POINT  
TRANSMISSION SERVICE**

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges set forth below:

- 1) **Yearly delivery:** one-twelfth of the demand charge of \$18.56769/KW of Reserved Capacity per year. |
- 2) **Monthly delivery** \$0.13172/KW of Reserved Capacity per month. |
- 3) **Weekly delivery** \$0.03017/KW of Reserved Capacity per week. |
- 4) **Daily delivery** \$0.0042/KW of Reserved Capacity per day. |

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

- 5) **Discounts:** Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an affiliate's use) must occur solely by posting on the

Effective March 13, 1997

Fitchburg Gas and  
Electric Light Company  
Open Access Transmission Tariff

~~Third Second~~ Revised Sheet No. | 137  
Supersedes  
~~Second First~~ Sheet No. | 137

### SCHEDULE 8

#### NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE

The Transmission Customer shall compensate the Transmission Provider for Non-Firm Point-To-Point Transmission Service up to the sum of the applicable charges set forth below:

- 1) **Monthly delivery:** \$0.09854/KW of Reserved Capacity per month.
- 2) **Weekly delivery:** \$0.0213/KW of Reserved Capacity per week.
- 3) **Daily delivery:** \$0.0032/KW of Reserved Capacity per day.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (2) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

- 4) **Hourly delivery:** The basic charge shall be that agreed upon by the Parties at the time this service is reserved and in no event shall exceed \$0.1374/MWH. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed

Effective March 13, 1998 |



Fitchburg Gas and ~~Third~~~~Second~~ Revised Sheet No. 174 |  
Electric Light Company Supersedes  
Open Access Transmission Tariff~~Second~~~~First~~ Revised Sheet No. 174

**ATTACHMENT H****ANNUAL TRANSMISSION REVENUE REQUIREMENT  
FOR NETWORK INTEGRATION TRANSMISSION SERVICE**

1. The Annual Transmission Revenue Requirement for purposes of the Network Integration Transmission Service shall be \$115,963,624,122. |
2. The amount in (1) shall be effective until amended by the Transmission Provider or modified by the Commission.

Effective Marchy 13, 1998? |

Fitchburg Gas and Electric Light Company  
Open Access Transmission Tariff

~~Fourth Third~~ Revised Sheet No. | 135  
~~Third Second~~ Revised Sheet No. | 135  
Supersedes

**SCHEDULE 7****LONG-TERM FIRM AND SHORT-TERM FIRM POINT-TO-POINT  
TRANSMISSION SERVICE**

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges set forth below:

- 1) **Yearly delivery:** one-twelfth of the demand charge of \$78.35369/KW of Reserved Capacity per year. |
- 2) **Monthly delivery** \$0.61372/KW of Reserved Capacity per month. |
- 3) **Weekly delivery** \$0.1417/KW of Reserved Capacity per week. |
- 4) **Daily delivery** \$0.02/KW of Reserved Capacity per day.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

- 5) **Discounts:** Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an affiliate's use) must occur solely by posting on the

Effective June ~~May~~ 13, 1997

Fitchburg Gas and Electric Light Company  
Open Access Transmission Tariff

~~Fourth~~~~Third~~ Revised Sheet No. | 137  
Supersedes  
~~Third~~~~Second~~ Sheet No. | 137

**SCHEDULE 8****NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE**

The Transmission Customer shall compensate the Transmission Provider for Non-Firm Point-To-Point Transmission Service up to the sum of the applicable charges set forth below:

- 1) **Monthly delivery:** \$0.46054/KW of Reserved Capacity per month.
- 2) **Weekly delivery:** \$0.1063/KW of Reserved Capacity per week.
- 3) **Daily delivery:** \$0.0152/KW of Reserved Capacity per day.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (2) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

- 4) **Hourly delivery:** The basic charge shall be that agreed upon by the Parties at the time this service is reserved and in no event shall exceed \$0.63074/MWH. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed

Effective June~~May~~ 13, 1997 |

DTE 02-24/25 (Electric)

Attachment AG-5-7

Page 28 of 71

Fitchburg Gas and ~~Fourth~~Third Revised Sheet No. 174 |  
 Electric Light Company Supersedes  
 Open Access Transmission TariffThirdSecond Revised Sheet No. 174

**ATTACHMENT H**

**ANNUAL TRANSMISSION REVENUE REQUIREMENT  
 FOR NETWORK INTEGRATION TRANSMISSION SERVICE**

1. The Annual Transmission Revenue Requirement for purposes of the Network Integration Transmission Service shall be \$544,130,624,122. |
2. The amount in (1) shall be effective until amended by the Transmission Provider or modified by the Commission.

Effective JuneMay 13, 1999 |

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 29 of 71

FILED  
OFFICE OF THE SECRETARY  
00 JAN 24 PM 3:14  
FEDERAL ENERGY  
REGULATORY  
COMMISSION

## Attachment C

List of names and addresses

Of persons to whom

This filing has been sent

Fitchburg Gas and Electric Light Company  
Service ListService List for OA97-6-000Customers

Kathryn L. Patton, Esquire  
Dynegy Power Marketing, Inc. (TX)  
1000 Louisiana  
Suite 5800  
Houston, TX 77002-5050

Eric Hegaseth  
Tractabel Power Inc.  
1177 West Loop South, 3<sup>rd</sup> Floor  
Houston, TX 77207

Peter G. Esposito, Esquire  
Dynegy Power Marketing, Inc. (DC)  
805 15<sup>th</sup> Street, N.W.  
Suite 510-A  
Washington, DC 20005-2207

Mr. Joseph R. Hartsoe  
Enron Corp. (DC)  
1775 Eye Street, N.W.  
Suite 800  
Washington, DC 20006-4607

Sam R. Hananel, Esquire  
Bracewell & Patterson, L.L.P. (DC)  
Suite 500  
2000 K Street, N. W.  
Washington, DC 20006-1872

Andrea J. Chambers, Esquire  
LeBeouf, Lamb, Greene & MacRae, L.L.P.(DC)  
Suite 1200  
1875 Connecticut Avenue, N.W.  
Washington, DC 20009-5728

Service List for OA97-635

Sanford L. Hartman, Esquire  
PG&E Generating Company (MD)  
7500 Old Georgetown Road  
Suite 1300  
Bethesda, MD 201814-6161

Gretchen Schott, Esquire  
Dickstein, Shapiro, Morin & Oshinsky, L.L.P.  
2101 L Street, N.W.  
Washington, DC 20037-1526

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 31 of 71

FILED  
OFFICE OF THE SECRETARY  
00 JAN 24 PM 3:14  
FEDERAL ENERGY  
REGULATORY  
COMMISSION

## Attachment D

### Cost Support

### For Proposed Rates

Period 1:  
Effective March 1, 1998

## Summary of Rates

Fitchburg Gas and Electric Light Company  
Summary of Transmission Open Access Rates

	Proposed Period 1 1-Mar-98	Proposed Period 2 1-Jun-99	
Current Revenue Requirement	\$624,122	\$624,122	FG&E OA Tariff, Second Revised Sheet No. 174
Proposed Revenue Requirement	\$115,963	\$544,130	Attachment D and E, Workpaper 1 of 8
Decrease in Revenue Requirement	\$508,159	\$79,992	
FG&E Peak Load	74,000	74,000	Attachment D and E, Workpaper 8 of 8
CP of All Firm Point-to-Point	0	0	
Contract Demand Reservation for Firm Pt-Pt	0	0	
Total	74,000	74,000	Total
Schedule 7: Firm Point-to-Point			
Annual Charge \$/kW	\$1.567	\$7.353	Revenue Requirement / Peak Load
Monthly Charge \$/kW	\$0.131	\$0.613	Annual Charge / 12
Weekly Charge \$/kW	\$0.030	\$0.141	Annual Charge / 52
Daily Charge \$/kW	\$0.004	\$0.020	Annual Charge / 365
Schedule 8: Non-Firm Point-to-Point *			
Monthly Charge \$/kW	\$0.098	\$0.460	Firm Pt to Pt Charge * 75%
Weekly Charge \$/kW	\$0.023	\$0.106	Firm Pt to Pt Charge * 75%
Daily Charge \$/kW	\$0.003	\$0.015	Firm Pt to Pt Charge * 75%
Hourly Charge \$/Mwh	\$0.134	\$0.630	Daily Charge / 24 * 1000

\* Rates reflect a 25% discount off the Firm Point-to-Point rates



DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 33 of 71

Non-PTF Revenue Requirements  
Worksheet 1 of 8

**Fitchburg Gas and Electric Light Company**  
**Annual Revenue Requirements of Non-PTF Facilities**  
**for costs in 1997**

Sheet: Worksheet 1

Shading denotes an input

Line No.	NEPOOL 0A Tariff Attachment F Reference	Section	FG&E	Total	Reference
<b>I. INVESTMENT BASE</b>					
1		Transmission Plant	902,807	902,807	Worksheet 3, line 1 column 5
2		General Plant	1,430	1,430	Worksheet 3, line 2 column 5
3		Plant Held For Future Use	38	38	Worksheet 3, line 4 column 5
4		Total Plant (Lines 1-2-3)	904,275	904,275	
5		Accumulated Depreciation	384,724	384,724	Worksheet 3, line 7 column 5
6		Accumulated Deferred Income Taxes	157,700	157,700	Worksheet 3, line 10 column 5, Changed Formula to +, not -
7		Loss On Recquired Debt	0	0	Worksheet 3, line 11 column 5
8		Other Regulatory Assets	61,770	61,770	Worksheet 3, line 14 column 5
9		Net Investment (Line 4-5-6-7-8)	423,621	423,621	
10		Prepayments	3,586	3,586	Worksheet 3, line 15 column 5
11		Materials & Supplies	1,530	1,530	Worksheet 3, line 16 column 5
12		Cash Working Capital	2,690	2,690	Worksheet 3, line 23 column 5
13		Total Investment Base (Line 9-10-11-12)	431,427	431,427	
<b>II. REVENUE REQUIREMENTS</b>					
14		Investment Return and Income Taxes	57,153	57,153	Worksheet 2
15		Depreciation Expense	24,128	24,128	Worksheet 4, line 3 column 5
16		Amortization of Loss on Recquired Debt	0	0	Worksheet 4, line 4 column 5
17		Investment Tax Credit	(704)	(704)	Worksheet 4, line 5 column 5
18		Property Tax Expense	13,641	13,641	Worksheet 4, line 8 column 5
19		Payroll Tax Expense	228	228	Worksheet 4, line 17 column 5
20		Operation & Maintenance Expense	16,655	16,655	Worksheet 4, line 13 column 5
21		Administrative & General Expense	4,862	4,862	Worksheet 4, line 16 column 5
22		Transmission Related Integrated Facilities Charge	0	0	Worksheet 7
23		Transmission Support Revenue	0	0	Worksheet 7
24		Transmission Support Expense	0	0	Worksheet 7
25		Transmission Related Expense from Generators	0	0	Worksheet 7
26		Transmission Related Taxes and Fees Charge	0	0	
27		Revenue for ST Trans. Service Under NEPOOL Tariff	0	0	
28		Transmission Rents Received from Electric Property	0	0	
29		Total Revenue Requirements (Line 14 thru 28)	115,963	115,963	

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 34 of 71

Non-PTF Revenue Requirements  
Worksheet 2 of 8

**Fitchburg Gas and Electric Light Company**  
Annual Revenue Requirements  
for costs in 1997

Sheet: Worksheet 2

Shading denotes an input

	CAPITALIZATION 12/31/97*	CAPITALIZATION RATIOS	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION
LONG-TERM DEBT	\$ 34,000,000	45.76%	7.80%	3.48%	0.22%
PREFERRED STOCK	2,400,886	3.23%	6.90%	0.22%	5.87%
COMMON EQUITY	37,907,095	51.01%	11.50%	5.87%	8.09%
TOTAL INVESTMENT RETURN	\$ 74,307,921	100.00%		9.57%	

\*See Worksheet 2

Cost of Capital Rate=

(a) Weighted Cost of Capital	=	0.0957
(b) Federal Income Tax	=	$\left( \frac{\text{R.O.E.} + \left( \frac{\text{Non-PTF Inv. (Tax Credit)} + \text{Eq. AFUDC of Deprec. Exp.}}{\text{PTF Inv. Base}} \right) / \text{Federal Income Tax Rate}}{1} \right)$
	=	$\left( \frac{0.0609 + \left( \frac{(704) + 0}{431,427} \right) / 0.34}{1} \right)$
	=	0.0305321
(c) State Income Tax	=	$\left( \frac{\text{R.O.E.} + \left( \frac{\text{Non-PTF Inv. (Tax Credit)} + \text{Eq. AFUDC of Deprec. Exp.}}{\text{PTF Inv. Base}} \right) / \text{State Income Tax Rate}}{1} \right)$
	=	$\left( \frac{0.0609 + \left( \frac{(704) + 0}{431,427} \right) / 0.0305321}{1} \right)$
	=	0.0062428
(a)+(b)+(c) Cost of Capital Rate	=	0.1324749

INVESTMENT BASE	\$	431,427	From Worksheet 1
x Cost of Capital Rate		0.1324749	
= Investment Return and Income Taxes		57,153	To Worksheet 1

Non-PTF Revenue Requirements  
Worksheet 3 of 8

## Fitchburg Gas and Electric Light Company

Sheet: Worksheet 3

Shading denotes an input

Line No.	(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) Non-PTF Allocation Factor (b)	(5) = (3)/(4) Non-PTF Allocated	FERC Form 1 Reference for col (1)
1	9,443,402		9,443,402		902,807	Line 1, Worksheet 5
2	1,000,009		14,959	9.5602%	1,430	Page 207.83g
3			9,458,361		904,237	
						Page 214
4	400		400	9.5602%	38	
						Page 219.23b
5	4,011,976		4,011,976	9.5602%	383,553	Page 219.25b
6	816,552		12,245	9.5602%	1,171	
7			4,024,221		384,724	
						Page 275.2k + 277.9k (d)
8	12,572,782		1,696,811	9.5602%	162,219	Page 234.8c (d)
9	350,287		47,274	9.5602%	4,519	Changed Formula
10			1,744,085		157,700	
						Page 111.65d
11	0		0	9.5602%	0	
						Page 232.30e
12	0		0	9.5602%	0	Page 233.1f - 269.1f (d)
13	4,787,494		646,115	9.5602%	61,770	
14	0		0	9.5602%	0	
15	4,787,494		646,115		61,770	
						Page 110.46d+p.200.8.c/p.200.8.b
16	2,507,725		37,513	9.5602%	3,586	Page 227.8c
17	18,001		16,001	9.5602%	1,530	
						Worksheet 1, Line 20
18					16,655	Worksheet 1, Line 21
19					4,862	Worksheet 1, Line 24
20					0	
21					21,517	x 45 / 360
22					0.125	
23					2,690	
24						

(a) Worksheet 5 of 8, line 11  
(b) Worksheet 5 of 8, line 3  
(c) Worksheet 5 of 8, line 16  
(d) Electric Only (Gas Portion Removed)

Fitchburg Gas and Electric Light Company  
Non-PTF Revenue Requirements  
Worksheet 4 of 8

		(2)	(3) = (1)*(2)	(4)	(5) = (3)/(4)	FERC Form 1 Reference for col (1)
		Wage/Plant Allocation Factors	Transmission Allocated	Non-PTF Allocation Factor (b)	Allocated	
Line No.		(1) Total				
Depreciation Expense						
1	Transmission Depreciation	251,274	251,274	9.5602%	24,022	Page 336.7b
2	General Depreciation	74,291	1,111	9.5602%	106	Page 336.9b
3	Total (line 1+2)		252,385		24,128	
4	Amortization of Loss on Rescued Debt	0	0	9.5602%	0	Page 117.58c
5	Amortization of Investment Tax Credits	54,533	7,360	9.5602%	704	Page 268.8f
Property Taxes						
6	Transmission Property Taxes	1,057,272	142,888	9.5602%	13,841	Page 262.263 (e)
7	General Property Taxes	0	0	9.5602%	0	Page 262.263
8	Total (line 6+7)		142,888		13,841	
Transmission Operation and Maintenance						
9	Operation and Maintenance	2,192,765	2,192,765	0.095602	209,833	Page 321.100b
10	Transmission of Electricity by Others - less	2,016,555	2,016,555	0.095602	192,978	Page 321.88b
11	Load Dispatching - less	0	0	0.095602	0	Page 321.84b
12	**Station Expenses & Rents - less/less				0	Page 321.85b & .90b
13	O&M less lines 10, 11 & 12	174,210	174,210	9.5602%	18,655	
Transmission Administrative and General						
14	Administrative and General	2,953,211				Page 323.168b
15	less Property Insurance (#124)	62,981				Page 323.156b
16	less Regulatory Commission Expense (#128)	60,235				Page 350
17	less General Advertising Expense (#20.1)	7,008				Page 323.162b
18	Subtotal (line 14 minus (15 thru 17))	2,822,987	42,229	9.5602%	4,037	
19	PLUS Property Insurance (less using Plant Abandoner	62,981	8,500	9.5602%	813	
20	PLUS Regulatory Comm. Exp. (FERC Assessment)	907	122	9.5602%	12	
21	PLUS Trans. Related General Advertising Expense	0	0	9.5602%	0	
22	Total A&G (line 18 plus (19 thru 21))	2,886,875	50,851		4,862	
23	Payroll Tax Expense	159,548	2,387	9.5602%	228	Footnote (d)

(a) Worksheet 5 of 8, line 11  
(b) Worksheet 5 of 8, line 3  
(c) Worksheet 5 of 8, line 16  
(d) Payroll taxes FERC Form 1, page 263.i, 263.1i

Federal Unemployment  
FICA 3,677  
Medicare 228,855  
State Unemployment 0  
MA Universal Health 21,508  
Payroll Taxes Capitalized 904  
(95,196)

Total 159,548 To Line 23

(e) Electric Only (Gas Portion Removed)  
\*\* Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Sheet: Worksheet 5		Non-PTF Revenue Requirements Worksheet 5 of 8	
Shading denotes an input		FERC Form 1 Reference	
Line No.		FG&E	Worksheet 1 - Summary Page 207.53g
1	Non - PTF Transmission Investment	902,807	
2	Total Transmission Investment	9,443,402	
3	Percent Allocation (Line 1/Line 2)	9.5602%	
<b><u>Transmission Wages and Salaries Allocation Factor</u></b>			
4	Direct Transmission Wages and Salaries	21,959	Page 354.19b Worksheet 6 of 8
5	Affiliated Company Transmission Wages and Salaries	0	
6	Total Transmission Wages and Salaries (Line 4 + Line 5)	21,959	
7	Total Wages and Salaries	1,595,131	Page 354.25b + Line 5
8	Administrative and General Wages and Salaries	127,200	Page 354.24b Worksheet 6 of 8
9	Affiliated Company Wages and Salaries less A&G	0	
10	Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	1,467,931	
11	Percent Allocation (Line 6/Line 10)	1.4959%	
<b><u>Plant Allocation Factor</u></b>			
12	Total Transmission Investment	9,443,402	Page 207.53g Worksheet 3, Line 2
13	plus Transmission-Related General Plant (Line 2 of Wkst. 3)	14,959	
14	= Revised Numerator (Line 12 + Line 13)	9,458,361	
15	Total Plant in Service	70,083,144	Page 207.88g
16	Percent Allocation (Line 14 / Line 15)	13.4959%	

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 38 of 71

Non-PTF Revenue Requirements  
Worksheet 6 of 8

Sheet: Worksheet 6

## Affiliated Company Wages and Salaries

Shading denotes an input

Line		FG&E
<b>"Affiliated" Transmission Wages and Salaries</b>		
#560 - 573		
1	560	0
2	562	0
3	564	0
4	566	0
5	568	0
6	569	0
7	570	0
8	571	0
9	572	0
10	573	0
11 = 1 thru 10	Total Transmission	0
12 =	Total "Affiliated" Wages and Salaries	0
<b>Less "Affiliated" Administrative and General Salaries</b>		
#920 - 935		
13	920	0
14	921	0
15	923	0
16	925	0
17	926	0
18	928	0
19	930	0
20	935	0
21 = 13 thru 20		0
22 = 12 less 21	Total "Affiliated" less A&G	0

DTE 02-24/25 (Electric)

Attachment AG-5-7

Page 39 of 71

Non-PTF Revenue Requirements  
Worksheet 7 of 8

Sheet Worksheet 7

Not applicable to Non-PTF Costs

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

Participant	PTF Supporting Facilities	FG&E		TOTAL	
		Revenues (a)	Expenses (b)	Revenues (a)	Expenses (b)
BECO	345 kV Sherman - Medway 336 line				
	115 kV Somerville 402 Substation				
	115/345 kV North Cambridge 509 Substation				
	345 kV Golden Hills -Mystic 389 (x4v) line				
	West Medway 345 kV breaker				
	115 kV Millbury-Medway 201 line				
	HQ Phase II - AC in MA	0	0	0	0
	345 kV "stabilizer" 342 line				
	345 kV Walpole - Medway 325 line				
	345 kV Carver - Walpole 331 line				
CEC	345 kV Jordan Rd - Canal 342 line				
	Second Canal line				
	345 kV Pilgrim-Bridgewater - 355 line				
	345 kV Myles Standish - Canal 342 line				
CMP	345 kV Buxton-South Gorham 386 line				
	115 kV Wyman 164-167 lines				
	115 kV Maine Yankee transmission				
EUA	345 kV Carver - Walpole 331 line				
	345 kV Medway - Bridgewater 344 Line				
	Northern Rhode Island transmission				
NEP	Chester SVC				
	Comerford 115 kV Substation				
	345 kV Sandy-Tewksbury 337 line				
	345 kV Tewksbury-Woburn 338 line				
	115 kV Tewksbury - Woburn M139 line				
	115 kV Tewksbury - Woburn N140 line				
	Moore 115 kV Substation				
	HQ Phase II - AC in MA	0	0	0	0
	345 kV Golden Hills-Mystic 349 line				
	345 kV NH/MA border-Tewksbury 394 line				
NU	115 kV Road - Washington V148 line				
	345 kV 303, 309 and 394 Seabrook lines				
	Fairmont 115 kV Substation				
	345 kV Millstone-Manchester 310 line				
	UI Substations				
	Black Pond				
Total =		0	0	0	0

Amount by which Support Expense exceeds Support Revenues  
(To Worksheet 3, Line 21, Column 5)

0

LNS Rate  
Worksheet 8 of 8

Summary of Fitchburg Gas and Electric Light Company System  
Monthly Coincident Peaks for 1997  
(Megawatts)

Sheet: Worksheet 8

Shading denotes an input

	JAN '97	FEB '97	MAR '97	APR '97	MAY '97	JUN '97	JUL '97	AUG '97	SEP '97	OCT '97	NOV '97	DEC '97
Day	8	4	14	2	6	26	15	11	2	29	25	22
Hour	18:00	18:00	19:00	20:00	18:00	11:00	12:00	17:00	14:00	18:00	18:00	19:00
FG&E	78	78	74	69	66	74	81	77	77	71	77	77

Annual FG&E System Average 12 CP Load 74

NOTE: Numbers represent FERC Form 1 Pages 401/401A coincident peaks.



DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 41 of 71

Workpaper 1 - Summary  
For Rates Effective March 1, 1998

Total Transmission Plant	<u>12/31/97 Balances</u>	
	\$ 5,815,064	Detail of Transmission Plant (per FERC's Seven Part T&D Facility Test), Page 4 of 4
Less:		
Transmission Plant (Joint Owned Units) (1)	\$ 138,492	Detail of Transmission Plant (per FERC's Seven Part T&D Facility Test), Page 4 of 4
Pool Transmission Facilities Plant	<u>\$ 4,773,765</u>	Detail of PTF Transmission Plant
Non-Pool Transmission Facilities Plant	\$ 902,807	

(1) External to FG&E Transmission System

DTE 02-24/25 (Electric)

Attachment AG-5-7

Page 42 of 71

**Worksheet 1**  
**Detail of Transmission Plant as of 12/31/97**  
**(Per FERC's Seven Part T&D Facility Test)**

Category	Account	Description	Amount Added	Amount Retired	Total Plant Balance	Transmission Percent	Transmission Plant Balance
<b>Flagg Pond</b>							
	353	Purchased from New England Power on 6/1/77	\$1,272,305.18	\$0.00	\$1,272,305.18	100%	\$1,272,305.18
	353	Transfer acquisition costs to acct 2-353-99	(\$84,274.29)	\$0.00	(\$84,274.29)	100%	(\$84,274.29)
	353	Retire 2 600 amp OCB plus installation	\$0.00	\$21,975.62	(\$21,975.62)	100%	(\$21,975.62)
	353	Install 115kv breaker status for REMVEC	\$14,556.40	\$0.00	\$14,556.40	100%	\$14,556.40
	353	See F-2172	\$937,758.94	\$12,809.54	\$924,949.40	100%	\$924,949.40
	353	Install 2 1000w Lucalox Floodlights near control shack	\$2,938.12	\$0.00	\$2,938.12	100%	\$2,938.12
	353	Install Potential Transformers	\$21,174.57	\$0.00	\$21,174.57	100%	\$21,174.57
	353	Retire PT	\$0.00	\$4,628.41	(\$4,628.41)	100%	(\$4,628.41)
	353	Metering	\$41,916.83	\$0.00	\$41,916.83	100%	\$41,916.83
	353	Install #27 & #28 airbreak switch on #2 Feeder	\$17,310.44	\$0.00	\$17,310.44	100%	\$17,310.44
	353	Retire #27 & #28 airbreak switch on #2 Feeder	\$0.00	\$5,762.36	(\$5,762.36)	100%	(\$5,762.36)
	353	Adjust to above entry	\$183.25	\$0.00	\$183.25	100%	\$183.25
	353	Install PT on 02 Line	\$8,435.83	\$0.00	\$8,435.83	100%	\$8,435.83
	353	Retire PT on 02 Line	\$0.00	\$21,174.57	(\$21,174.57)	100%	(\$21,174.57)
	353	Install 2016 of 4/0 st bare copper	\$1,868.89	\$0.00	\$1,868.89	100%	\$1,868.89
	353	Install 50' of 2" PVC Pipe	\$4,033.47	\$0.00	\$4,033.47	100%	\$4,033.47
	353	785' of 4/0 at 600 volt	\$0.00	\$1,198.75	(\$1,198.75)	100%	(\$1,198.75)
	353	50' of 4/0 wire	\$0.00	\$31.55	(\$31.55)	100%	(\$31.55)
	353	760' of 4/0 hard drawn wire	\$0.00	\$1,310.88	(\$1,310.88)	100%	(\$1,310.88)
	353	50' of 4/0 wire	\$0.00	\$106.74	(\$106.74)	100%	(\$106.74)
	353	965' of 4/0 wire	\$0.00	\$2,876.75	(\$2,876.75)	100%	(\$2,876.75)
	353	50' of 2" PVC Pipe	\$0.00	\$164.50	(\$164.50)	100%	(\$164.50)
	353	GE 69kv Bushing in OCB s/n 0139A4928-201	\$0.00	\$14,231.56	(\$14,231.56)	100%	(\$14,231.56)
	353	69kv 1200amp bushing in OCB	\$2,405.57	\$0.00	\$2,405.57	100%	\$2,405.57
	353	Data Star Recorders	\$3,780.00	\$0.00	\$3,780.00	100%	\$3,780.00
	353	Installed Data Star Recorder Software Level #2	\$750.00	\$0.00	\$750.00	100%	\$750.00
	353	Payroll & overheads for above install	\$1,014.38	\$0.00	\$1,014.38	100%	\$1,014.38
	353	Recorder Tape System GE	\$0.00	\$5,300.00	(\$5,300.00)	100%	(\$5,300.00)
	353	Universal Mag Tape Cartridges	\$0.00	\$637.20	(\$637.20)	100%	(\$637.20)
	353	Watt/Var Transducer	\$5,950.00	\$0.00	\$5,950.00	100%	\$5,950.00
	353	Volt Transducer	\$185.00	\$0.00	\$185.00	100%	\$185.00
	353	Shipping & Handling	\$34.92	\$0.00	\$34.92	100%	\$34.92
	353	500' 4/0 #12 AWG Control Cable	\$1,142.10	\$0.00	\$1,142.10	100%	\$1,142.10
	353	50' 1/2 watt precision resistors	\$41.39	\$0.00	\$41.39	100%	\$41.39
	353	350' T&B Stakon Terminals	\$86.45	\$0.00	\$86.45	100%	\$86.45
	353	69' Copper Wire	\$10.35	\$0.00	\$10.35	100%	\$10.35
	353	Cable Tie	\$17.55	\$0.00	\$17.55	100%	\$17.55
	353	Misc Parts	\$52.76	\$0.00	\$52.76	100%	\$52.76
	353	Labor for fixing recorder	\$368.80	\$0.00	\$368.80	100%	\$368.80
	353	Labor for wiring	\$124.20	\$0.00	\$124.20	100%	\$124.20
	353	Install GETEC Telemetry to REMVAC (Liabilities)	\$422.31	\$0.00	\$422.31	100%	\$422.31
	353	Overheads	\$6,638.54	\$0.00	\$6,638.54	100%	\$6,638.54
	353	Payroll	\$8,030.61	\$0.00	\$8,030.61	100%	\$8,030.61
	353	Bristol DPC 333010A computer	\$4,230.71	\$0.00	\$4,230.71	100%	\$4,230.71
	353	Bristol SLC 371140A Recorders	\$5,771.41	\$0.00	\$5,771.41	100%	\$5,771.41
	353	Bristol Power Supply	\$515.05	\$0.00	\$515.05	100%	\$515.05
	353	Labor to set up Bristol	\$2,355.00	\$0.00	\$2,355.00	100%	\$2,355.00
	353	Spare Interrupter Assembly for 115kv Circuit breaker	\$9,512.00	\$0.00	\$9,512.00	100%	\$9,512.00
	353	Retire Westinghouse auto transformer	\$0.00	\$152,101.77	(\$152,101.77)	100%	(\$152,101.77)
	353	Redesign Rewind & Rebuild 30/40/50 MVA West.	\$0.00	\$0.00	\$0.00	100%	\$0.00
	353	Auto Transformer s/n 34891 includes all charges	\$514,480.75	\$0.00	\$514,480.75	100%	\$514,480.75
	353	Purch used Auto Transformer 24/40 mva Magntek	\$200,032.04	\$0.00	\$200,032.04	100%	\$200,032.04
	353	For future costs assoc. w/ additions 69kv connections	(\$97,766.02)	\$0.00	(\$97,766.02)	100%	(\$97,766.02)
	353	Fused Disconnect	\$0.00	\$505.26	(\$505.26)	100%	(\$505.26)
	353	Replace Fused Disconnect	\$434.21	\$0.00	\$434.21	100%	\$434.21
	353	Install & purch EM-GRO Air Compressor	\$1,273.97	\$0.00	\$1,273.97	100%	\$1,273.97
	353	Install Deadend Structure 3-arrestors & 6-bushings	\$30,233.66	\$0.00	\$30,233.66	100%	\$30,233.66
	353	Construct 115 Kv facilities & connect spare transformer	\$0.00	\$0.00	\$0.00	100%	\$0.00
	353	in place of failed #1 autotrans.	\$237,601.84	\$0.00	\$237,601.84	100%	\$237,601.84
	353	Repair and rewind of 115-69 KV #1 Autotransformer	\$0.00	\$0.00	\$0.00	100%	\$0.00
	353	including uprating to a rated capacity of 60/80/100 MVA	\$335,776.00	\$0.00	\$335,776.00	100%	\$335,776.00
	353	Insurance Recovery less deductible of \$25K	(\$321,696.66)	\$0.00	(\$321,696.66)	100%	(\$321,696.66)
	353	Lightning arrestors, delivery and testing	\$6,840.09	\$0.00	\$6,840.09	100%	\$6,840.09
	353	60/80/100 MVA 115-69KV Autotransformer	\$544,772.08	\$0.00	\$544,772.08	100%	\$544,772.08
	353	Installation cost for above	\$42,610.39	\$0.00	\$42,610.39	100%	\$42,610.39
	353	69kv Post Insulators	\$7,125.43	\$0.00	\$7,125.43	100%	\$7,125.43
	353	Current Transformers	\$0.00	\$8,000.00	(\$8,000.00)	100%	(\$8,000.00)
	Subtotal						\$3,540,549.05
<b>Flagg Pond</b>							
	352		\$24,143.99	\$0.00	\$24,143.99	100%	\$24,143.99
	Subtotal						\$24,143.99
<b>Summer Street</b>							
	353	705' Chain Link Fence	\$3,261.00	\$0.00	\$3,261.00	100%	\$3,261.00
	353	158' Chain Link Fence	\$1,150.43	\$0.00	\$1,150.43	100%	\$1,150.43
	353	4 - Relay GE	\$1,610.00	\$0.00	\$1,610.00	100%	\$1,610.00
	353	6 - GE Potential Transformers	\$1,592.00	\$0.00	\$1,592.00	100%	\$1,592.00
	353	3 - Switches for Control Power	\$164.00	\$0.00	\$164.00	100%	\$164.00
	353	Conduit & Control Wiring	\$5,751.00	\$0.00	\$5,751.00	100%	\$5,751.00

DTE 02-24/25 (Electric)

Attachment AG-5-7

Page 43 of 71

**Detail of Transmission Plant as of 12/31/97  
(Per FERC's Seven Part T&D Facility Test)**

Category	Account	Description	Amount Added	Amount Retired	Total Plant Balance	Transmission Percent	Transmission Plant Balance
	353	Conductors & Insulators	\$804.00	\$0.00	\$804.00	100%	\$804.00
	353	Transformer Foundation	\$892.00	\$0.00	\$892.00	100%	\$892.00
	353	Switchgear Foundation	\$892.00	\$0.00	\$892.00	100%	\$892.00
	353	Reactor Foundation	\$892.00	\$0.00	\$892.00	100%	\$892.00
	353	Neutral Resistor Foundation	\$446.00	\$0.00	\$446.00	100%	\$446.00
	353	General Electric 21000/28000/35000MVA Power Transfome	\$66,743.00	\$0.00	\$66,743.00	100%	\$66,743.00
	353	3 - GE 600 Amp 300 Volt outdoor Reactor	\$4,674.00	\$0.00	\$4,674.00	100%	\$4,674.00
	353	2 - GE 1200 amp 14.4KV oil Circuit Breaker	\$10,731.00	\$0.00	\$10,731.00	100%	\$10,731.00
	353	37 - Disconnect Switches	\$6,014.00	\$0.00	\$6,014.00	100%	\$6,014.00
	353	24 - Tandem Transfer Switches	\$3,009.00	\$0.00	\$3,009.00	100%	\$3,009.00
	353	24 - 15kv valve Lightning Arresters	\$3,215.00	\$0.00	\$3,215.00	100%	\$3,215.00
	353	Grounding Material Installed	\$1,601.00	\$0.00	\$1,601.00	100%	\$1,601.00
	353	Bus Connections 13.8kv Installed	\$6,554.76	\$0.00	\$6,554.76	100%	\$6,554.76
	353	GE Neutral Resistor	\$10,825.00	\$0.00	\$10,825.00	100%	\$10,825.00
	353	GE Oil Circuit Breaker	\$260.00	\$0.00	\$260.00	100%	\$260.00
	353	GE Protected Aisle Switchgear	\$19,645.00	\$0.00	\$19,645.00	100%	\$19,645.00
	353	18 - Poles installed Terminations of 13.8kv Feeder in S/S	\$1,571.00	\$0.00	\$1,571.00	100%	\$1,571.00
	353	62 - Crossarms	\$918.00	\$0.00	\$918.00	100%	\$918.00
	353	2007 - 336.4MCM Alum wire	\$2,472.00	\$0.00	\$2,472.00	100%	\$2,472.00
	353	12 - Anchor guys	\$311.00	\$0.00	\$311.00	100%	\$311.00
	353	4 - 600 amp Oil Circuit Breakers 250 MBA 14.4kv	\$20,433.00	\$0.00	\$20,433.00	100%	\$20,433.00
	353	2 - Recloser installed	\$11,622.00	\$0.00	\$11,622.00	100%	\$11,622.00
	353	1 - 18' Switch Stick	\$88.00	\$0.00	\$88.00	100%	\$88.00
	353	2 - Flood lights	\$311.00	\$0.00	\$311.00	100%	\$311.00
	353	2 - Indicators on cooling fans of transformer & oil pump	\$75.00	\$0.00	\$75.00	100%	\$75.00
	353	Foundation for OCB	\$1,661.00	\$0.00	\$1,661.00	100%	\$1,661.00
	353	Foundation for Steel Structure	\$2,545.00	\$0.00	\$2,545.00	100%	\$2,545.00
	353	Foundation for Control House	\$961.00	\$0.00	\$961.00	100%	\$961.00
	353	3 - GE 2500mva OCB	\$37,901.00	\$0.00	\$37,901.00	100%	\$37,901.00
	353	Steel Structure	\$9,153.00	\$0.00	\$9,153.00	100%	\$9,153.00
	353	Control House	\$2,990.00	\$0.00	\$2,990.00	100%	\$2,990.00
	353	Grounding	\$894.00	\$0.00	\$894.00	100%	\$894.00
	353	3 - Control Panels	\$9,410.00	\$0.00	\$9,410.00	100%	\$9,410.00
	353	Conduit & Wiring	\$2,569.00	\$0.00	\$2,569.00	100%	\$2,569.00
	353	Supervisory Equipment	\$12,037.00	\$0.00	\$12,037.00	100%	\$12,037.00
	353	Additional Charges	\$3,325.00	\$0.00	\$3,325.00	100%	\$3,325.00
	353	69kv Bus Insulators & Connectors	\$5,763.00	\$0.00	\$5,763.00	100%	\$5,763.00
	353	5 - 69kv 1200 amp TPST	\$11,228.00	\$0.00	\$11,228.00	100%	\$11,228.00
	353	23 - 69kv 600 amp Disconnect Switch	\$7,682.00	\$0.00	\$7,682.00	100%	\$7,682.00
	353	9 - 69kv Lightning Arrestors	\$3,682.00	\$0.00	\$3,682.00	100%	\$3,682.00
	353	3 - 69kv Capacitor Devices	\$2,810.00	\$0.00	\$2,810.00	100%	\$2,810.00
	353	Foundation for OCB	\$777.00	\$0.00	\$777.00	100%	\$777.00
	353	Conduit Connection installed	\$509.00	\$0.00	\$509.00	100%	\$509.00
	353	Control Panel	\$2,992.00	\$0.00	\$2,992.00	100%	\$2,992.00
	353	Termination for #08 Line	\$1,303.00	\$0.00	\$1,303.00	100%	\$1,303.00
	353	Overheads	\$4,416.00	\$0.00	\$4,416.00	100%	\$4,416.00
	353	1 - 69kv OCB	\$16,347.00	\$0.00	\$16,347.00	100%	\$16,347.00
	353	Overheads	\$670.00	\$0.00	\$670.00	100%	\$670.00
	353	2 - Underfrequency Relays	\$2,249.00	\$0.00	\$2,249.00	100%	\$2,249.00
	353	Foundation	\$1,652.00	\$0.00	\$1,652.00	100%	\$1,652.00
	353	69kv Bus Insulators & Connectors	\$7,183.90	\$0.00	\$7,183.90	100%	\$7,183.90
	353	Steel Structure	\$7,083.00	\$0.00	\$7,083.00	100%	\$7,083.00
	353	Grounding	\$538.00	\$0.00	\$538.00	100%	\$538.00
	353	Control Panels	\$9,067.00	\$0.00	\$9,067.00	100%	\$9,067.00
	353	Conduit & Wiring	\$875.00	\$0.00	\$875.00	100%	\$875.00
	353	2 - 69kv Air Break Switches	\$6,128.00	\$0.00	\$6,128.00	100%	\$6,128.00
	353	9 - 69kv 600 amp Disconnect Switch	\$4,037.00	\$0.00	\$4,037.00	100%	\$4,037.00
	353	1 - 69kv OCB	\$18,907.00	\$0.00	\$18,907.00	100%	\$18,907.00
	353	6 - 69kv Lightning Arrestors	\$4,362.00	\$0.00	\$4,362.00	100%	\$4,362.00
	353	1 - Electric Heater in 13.8KV Switchgear cabin	\$260.12	\$0.00	\$260.12	100%	\$260.12
	353	8 - Bushings 2000amp 13.8kv high volt for roof of building	\$4,093.17	\$0.00	\$4,093.17	100%	\$4,093.17
	353	3 - Bushing on GE Oil Circuit Breakers on #3 & #40 feeder	\$1,257.58	\$0.00	\$1,257.58	100%	\$1,257.58
	353	Transformer Replacement	\$937.01	\$0.00	\$937.01	100%	\$937.01
	353	Transformer Lightning Arrester replaced	\$399.55	\$0.00	\$399.55	100%	\$399.55
	353	2 - 69kv OCB for #01 Line	\$96,019.79	\$0.00	\$96,019.79	100%	\$96,019.79
	353	Supervisory Control Recloser Indicator	\$2,898.60	\$0.00	\$2,898.60	100%	\$2,898.60
	353	Install 540' of #12-7 conductor to Robin Hood Park	\$841.90	\$0.00	\$841.90	100%	\$841.90
	353	Nominal Capacity Lead Antimony Battery	\$1,943.92	\$0.00	\$1,943.92	100%	\$1,943.92
	353	3 - 600 amp 13.8kv outdoor reactors	\$15,085.31	\$0.00	\$15,085.31	100%	\$15,085.31
	353	6 - Bushings for #40-10 3 oil circuit breaker	\$3,096.35	\$0.00	\$3,096.35	100%	\$3,096.35
	353	FERC Adjustment	(\$79.00)	\$0.00	(\$79.00)	100%	(\$79.00)
	353	Install 2"x2" plywood board in control house	\$618.78	\$0.00	\$618.78	100%	\$618.78
	353	Capacitor Bank 36 - 200Kvar Cap Units	\$75,309.61	\$0.00	\$75,309.61	100%	\$75,309.61
	353	Additions	\$10,968.78	\$0.00	\$10,968.78	100%	\$10,968.78
	353	Additions	\$11,232.45	\$0.00	\$11,232.45	100%	\$11,232.45
	353	Purch of McGraw Edison UCR Oil Switch	\$4,169.15	\$0.00	\$4,169.15	100%	\$4,169.15
	353	2 - Installed 69kv Bus insulator	\$785.20	\$0.00	\$785.20	100%	\$785.20
	353	8 - Yuasa Epide batteries for DC Supply	\$3,225.84	\$0.00	\$3,225.84	100%	\$3,225.84
	353	Install stage Regulator & Nitro tanks to transformer	\$845.22	\$0.00	\$845.22	100%	\$845.22
	353	Remove & install new #2 Capacitor Switch	\$691.47	\$0.00	\$691.47	100%	\$691.47
	353	Bar Gate installation	\$2,440.00	\$0.00	\$2,440.00	100%	\$2,440.00
	353	Disconnect Switches	\$6,455.87	\$0.00	\$6,455.87	100%	\$6,455.87
	353	Disconnect Switches		\$975.24	(\$975.24)	100%	(\$975.24)
	353	Pin Insulator	\$946.93		\$946.93	100%	\$946.93
	353	Epoxidators	\$2,113.14		\$2,113.14	100%	\$2,113.14

**Detail of Transmission Plant as of 12/31/97  
(Per FERC's Seven Part T&D Facility Test)**

Category	Account	Description	Amount Added	Amount Retired	Total Plant Balance	Transmission Percent	Transmission Plant Balance
	Subtotal						\$637,815.59
<b>#01 &amp; #02 Lines</b>							
	356	02 Line conductor 1969 556.7 MCM	\$34,547.61	\$0.00	\$34,547.61	100%	\$34,547.61
	356	01 Line conductor 1973 556.7 MCM	\$139,411.07	\$0.00	\$139,411.07	100%	\$139,411.07
	356	02 Line shield wire 1969 2 wires - 3 No. 6	\$9,919.24	\$0.00	\$9,919.24	100%	\$9,919.24
	356	01 Line shield wire 1973 1 wire - 3 No. 6	\$12,961.62	\$0.00	\$12,961.62	100%	\$12,961.62
	Subtotal						\$196,839.54
<b>#01 &amp; #02 Line Poles and Xarms</b>							
	355	02 Line poles 1969 (Itemized list GH-I)	\$221,574.99	\$0.00	\$221,574.99	100%	\$221,574.99
	355	01 Line poles 1969 (Itemized list GH-I)	\$341,628.84	\$0.00	\$341,628.84	100%	\$341,628.84
	Subtotal						\$563,203.83
<b>Electric Station</b>							
	353	Special Transformer Inclosure	\$146.57	\$0.00	\$146.57	100%	\$146.57
	353	Fence	\$506.71	\$0.00	\$506.71	100%	\$506.71
	353	Concrete Mat for transformer	\$980.23	\$0.00	\$980.23	100%	\$980.23
	353	5000kva GE 3 Phase transformer	\$15,568.02	\$0.00	\$15,568.02	100%	\$15,568.02
	353	Install Transformer	\$1,727.22	\$0.00	\$1,727.22	100%	\$1,727.22
	353	Reinforce foundation	\$3,271.47	\$0.00	\$3,271.47	100%	\$3,271.47
	353	155' - fence	\$868.20	\$0.00	\$868.20	100%	\$868.20
	353	13kv cable connections to switchgear	\$1,859.53	\$0.00	\$1,859.53	100%	\$1,859.53
	353	5000kva GE 3 Phase transformer	\$17,995.96	\$0.00	\$17,995.96	100%	\$17,995.96
	353	Foundation	\$4,086.42	\$0.00	\$4,086.42	100%	\$4,086.42
	353	Install Transformer	\$900.53	\$0.00	\$900.53	100%	\$900.53
	353	13.8kv cable connections to switchgear	\$3,854.34	\$0.00	\$3,854.34	100%	\$3,854.34
	353	5 kv bus duct installed	\$10,797.32	\$0.00	\$10,797.32	100%	\$10,797.32
	353	Eastern Fence 12' double drive gate & posts	\$149.00	\$0.00	\$149.00	100%	\$149.00
	353	69kv Power Transformer & Foundation	\$101,768.00	\$0.00	\$101,768.00	100%	\$101,768.00
	353	Galv Steel Terminating Structure	\$8,099.00	\$0.00	\$8,099.00	100%	\$8,099.00
	353	Ins & misc connections installed	\$733.00	\$0.00	\$733.00	100%	\$733.00
	353	3x8 Lighted Sign	\$282.00	\$0.00	\$282.00	100%	\$282.00
	353	Additional 1800 Kvar of capacitors in bank	\$52,613.25	\$0.00	\$52,613.25	100%	\$52,613.25
	353	Auxiliary Current transformer	\$2,104.00	\$0.00	\$2,104.00	100%	\$2,104.00
	353	West. differential relays	\$348.00	\$0.00	\$348.00	100%	\$348.00
	353	Lockout & auxiliary relays	\$1,447.00	\$0.00	\$1,447.00	100%	\$1,447.00
	353	15 kv current Transformers	\$1,260.00	\$0.00	\$1,260.00	100%	\$1,260.00
	353	Annunciators installed	\$669.00	\$0.00	\$669.00	100%	\$669.00
	353	13kv Potential transformer	\$3,763.00	\$0.00	\$3,763.00	100%	\$3,763.00
	353	Central Wiring	\$4,074.00	\$0.00	\$4,074.00	100%	\$4,074.00
	353	West 450kva Current Limiting reactor	\$6,988.00	\$0.00	\$6,988.00	100%	\$6,988.00
	353	Change range of Speedomax Lead & Northrup Recorder	\$365.00	\$0.00	\$365.00	100%	\$365.00
	353	GE Auxiliary transformer & Relays	\$3,295.00	\$0.00	\$3,295.00	100%	\$3,295.00
	353	Speedomax Recorder Leeds & Northrup	\$1,378.00	\$0.00	\$1,378.00	100%	\$1,378.00
	353	Thermal Converter	\$457.00	\$0.00	\$457.00	100%	\$457.00
	353	Parts to change range of thermal converter	\$1,169.00	\$0.00	\$1,169.00	100%	\$1,169.00
	353	Converting range on Speedomax	\$333.00	\$0.00	\$333.00	100%	\$333.00
	353	Converting range on Speedomax	\$288.00	\$0.00	\$288.00	100%	\$288.00
	353	Converting range on Speedomax	\$332.00	\$0.00	\$332.00	100%	\$332.00
	353	Amplifier Leeds & Northrup to be used with Speedomax	\$158.00	\$0.00	\$158.00	100%	\$158.00
	353	Supervisory Equip installed	\$4,452.00	\$0.00	\$4,452.00	100%	\$4,452.00
	353	Additional charges for above	\$1,230.00	\$0.00	\$1,230.00	100%	\$1,230.00
	353	Capitalized Overheads for above	\$248.00	\$0.00	\$248.00	100%	\$248.00
	353	Underground system improvement	\$5,667.99	\$0.00	\$5,667.99	100%	\$5,667.99
	353	Install of a 13.8kv Bus between #6 & Bus #2	\$58,844.30	\$0.00	\$58,844.30	100%	\$58,844.30
	353	Replace Lead Calcium Battery	\$7,965.19	\$0.00	\$7,965.19	100%	\$7,965.19
	353	Purch Power Supply for Tone Equipment	\$413.74	\$0.00	\$413.74	100%	\$413.74
	Subtotal						\$333,435.99
<b>Electric Station Line</b>							
	356	Trans Line from Electric Station	\$5,604.00	\$0.00	\$5,604.00	100%	\$5,604.00
	356	Trans Line from Electric Station	\$15,011.00	\$0.00	\$15,011.00	100%	\$15,011.00
	356	Trans Line from Electric Station Allocation (Estimated)	\$36,342.86	\$0.00	\$36,342.86	100%	\$36,342.86
	Subtotal						\$56,957.86
<b>Land</b>							
	350	Cost of Land purchased from New England Power Co.	\$6,663.35	\$0.00	\$6,663.35	100%	\$6,663.35
	350	Acquisition Costs for land at Flagg Pond & Beech St. Subs	\$817.70	\$0.00	\$817.70	100%	\$817.70
	350	Transmission Land #01, 02 & 06 Lines	\$78,545.00	\$0.00	\$78,545.00	100%	\$78,545.00
	350	Transmission ROW #01, 02 & 06 Lines	\$144,391.00	\$0.00	\$144,391.00	100%	\$144,391.00
	351	Clearing on Line #01 Flagg Pond to Summer St. S/S	\$6,654.38	\$0.00	\$6,654.38	100%	\$6,654.38
	351	Install gate at both ends of 01 & 02 tap	\$1,381.92	\$0.00	\$1,381.92	100%	\$1,381.92
	350	Off Summer St. Fitchburg	\$4,797.00	\$0.00	\$4,797.00	100%	\$4,797.00
	350	Crushed Stone for Summer St. S/S yard	\$2,890.00	\$0.00	\$2,890.00	100%	\$2,890.00
	350	Grading for Summer St. S/S	\$528.00	\$0.00	\$528.00	100%	\$528.00

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 45 of 71

**Detail of Transmission Plant as of 12/31/97  
(Per FERC's Seven Part T&D Facility Test)**

<u>Category</u>	<u>Account</u>	<u>Description</u>	<u>Amount</u>	<u>Amount</u>	<u>Total Plant</u>	<u>Transmission</u>	<u>Transmission</u>
	<u>Subtotal</u>		<u>Added</u>	<u>Retired</u>	<u>Balance</u>	<u>Percent</u>	<u>Plant Balance</u>
							<b>\$246,668.35</b>
<b>NEPCo Acquisition Cost</b>							
	352		\$4,018.08			61% *	\$2,441.52
	353		\$122,600.09			61% *	\$74,495.91
							<b>\$76,937.43</b>
<b>JOINT OWNED UNITS</b>							
Milestone III	352		\$11,383.84			100%	\$11,383.84
	353		\$50,261.66			100%	\$50,261.66
	355		\$13,202.36			100%	\$13,202.36
	356		\$3,302.94			100%	\$3,302.94
			\$0.00			100%	\$0.00
Wyman#4	352		\$4,636.19			100%	\$4,636.19
	353		\$0.00			100%	\$0.00
			\$0.00			100%	\$0.00
New Haven	352		\$55,704.98			100%	\$55,704.98
	353						
							<b>\$138,491.97</b>
<b>Grand Total</b>						<b>Total</b>	<b>\$5,815,064</b>

\* 61% is the ratio of transmission plant as defined in this workpaper,  
to transmission plant as defined in Dec 31, 1997 FERC Form 1 filing, page 207 line 53.  
NEPCo acquisition costs are being allocated in the same percentage as  
facilities being allocated between transmission and distribution.

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 46 of 71

**Worksheet 1**  
**Detail of PTF Transmission Plant as of 12/31/97**

Category	Account	Description	Amount Added	Amount Retired	Total Plant Balance	PTF Percent	PTF Plant Balance
Fiagg Pond	352	Structures and Improvements	\$24,143.99	\$0.00	\$24,143.99	100%	\$24,143.99
	353	Purchased from New England Power on 6/1/77	\$1,272,305.18	\$0.00	\$1,272,305.18	100%	\$1,272,305.18
	353	Transfer acquisition costs to acct 2-353-99	(\$84,274.29)	\$0.00	(\$84,274.29)	100%	(\$84,274.29)
	353	Retire 2 600 amp OCB plus installation	\$0.00	\$21,975.62	(\$21,975.62)	100%	(\$21,975.62)
	353	Install 115kv breaker status for REMVEC	\$14,556.40	\$0.00	\$14,556.40	100%	\$14,556.40
	353	See F-2172	\$937,758.94	\$12,808.54	\$924,949.40	100%	\$924,949.40
	353	Install 2 1000w Lucalox Floodlights near control shack	\$2,938.12	\$0.00	\$2,938.12	100%	\$2,938.12
	353	Install Potential Transformers	\$21,174.57	\$0.00	\$21,174.57	100%	\$21,174.57
	353	Retire PT	\$0.00	\$4,628.41	(\$4,628.41)	100%	(\$4,628.41)
	353	Metering	\$41,916.83	\$0.00	\$41,916.83	100%	\$41,916.83
	353	Install #27 & #28 airbreak switch on #2 Feeder	\$17,310.44	\$0.00	\$17,310.44	100%	\$17,310.44
	353	Retire #27 & #28 airbreak switch on #2 Feeder	\$0.00	\$5,762.36	(\$5,762.36)	100%	(\$5,762.36)
	353	Adjust to above entry	\$183.25	\$0.00	\$183.25	100%	\$183.25
	353	Install PT on 02 Line	\$8,435.83	\$0.00	\$8,435.83	100%	\$8,435.83
	353	Retire PT on 02 Line	\$0.00	\$21,174.57	(\$21,174.57)	100%	(\$21,174.57)
	353	Install 2016 of 4/0 st bare copper	\$1,868.89	\$0.00	\$1,868.89	100%	\$1,868.89
	353	Install 50' of 2" PVC Pipe	\$4,033.47	\$0.00	\$4,033.47	100%	\$4,033.47
	353	785' of 4/0 st 600 volt	\$0.00	\$1,198.75	(\$1,198.75)	100%	(\$1,198.75)
	353	50' of 4/0 wire	\$0.00	\$31.55	(\$31.55)	100%	(\$31.55)
	353	780' of 4/0 hard drawn wire	\$0.00	\$1,310.88	(\$1,310.88)	100%	(\$1,310.88)
	353	50' of 4/0 wire	\$0.00	\$106.74	(\$106.74)	100%	(\$106.74)
	353	865' of 4/0 wire	\$0.00	\$2,878.75	(\$2,878.75)	100%	(\$2,878.75)
	353	50' of 2" PVC Pipe	\$0.00	\$164.50	(\$164.50)	100%	(\$164.50)
	353	GE 69kv Bushing in OCB s/n 0139A4928-201	\$0.00	\$14,231.56	(\$14,231.56)	100%	(\$14,231.56)
	353	69kv 1200amp bushing in OCB	\$2,405.57	\$0.00	\$2,405.57	100%	\$2,405.57
	353	Data Star Recorders	\$3,780.00	\$0.00	\$3,780.00	100%	\$3,780.00
	353	Installed Data Star Recorder Software Level #2	\$750.00	\$0.00	\$750.00	100%	\$750.00
	353	Payroll & overheads for above install	\$1,014.38	\$0.00	\$1,014.38	100%	\$1,014.38
	353	Recorder Tape System GE	\$0.00	\$5,300.00	(\$5,300.00)	100%	(\$5,300.00)
	353	Universal Mag Tape Cartridges	\$0.00	\$637.20	(\$637.20)	100%	(\$637.20)
	353	Watt/Var Transducer	\$5,950.00	\$0.00	\$5,950.00	100%	\$5,950.00
	353	Volt Transducer	\$185.00	\$0.00	\$185.00	100%	\$185.00
	353	Shipping & Handling	\$34.92	\$0.00	\$34.92	100%	\$34.92
	353	500' 4/C #12 AWG Control Cable	\$1,142.10	\$0.00	\$1,142.10	100%	\$1,142.10
	353	50' 1/2 watt precision resistors	\$41.39	\$0.00	\$41.39	100%	\$41.39
	353	350' T&B Stakon Terminals	\$86.45	\$0.00	\$86.45	100%	\$86.45
	353	69' Copper Wire	\$10.35	\$0.00	\$10.35	100%	\$10.35
	353	Cable Tie	\$17.55	\$0.00	\$17.55	100%	\$17.55
	353	Misc Parts	\$52.78	\$0.00	\$52.78	100%	\$52.78
	353	Labor for fixing recorder	\$368.80	\$0.00	\$368.80	100%	\$368.80
	353	Labor for wiring	\$124.20	\$0.00	\$124.20	100%	\$124.20
	353	Install GETEC Telemetering to REMVAC (Liabilities)	\$422.31	\$0.00	\$422.31	100%	\$422.31
	353	Overheads	\$6,638.54	\$0.00	\$6,638.54	100%	\$6,638.54
	353	Payroll	\$8,030.61	\$0.00	\$8,030.61	100%	\$8,030.61
	353	Bristol DPC 333010A computer	\$4,230.71	\$0.00	\$4,230.71	100%	\$4,230.71
	353	Bristol SLC 371140A Recorders	\$5,771.41	\$0.00	\$5,771.41	100%	\$5,771.41
	353	Bristol Power Supply	\$515.05	\$0.00	\$515.05	100%	\$515.05
	353	Labor to set up Bristol	\$2,355.00	\$0.00	\$2,355.00	100%	\$2,355.00
	353	Spare Interrupter Assembly for 115kv Circuit breaker	\$9,512.00	\$0.00	\$9,512.00	100%	\$9,512.00
	353	Retire Westinghouse auto transformer	\$0.00	\$152,101.77	(\$152,101.77)	100%	(\$152,101.77)
	353	Redesign Rewind & Rebuild 30/40/50 MVA West	\$0.00	\$0.00	\$0.00	100%	\$0.00
	353	Auto Transformer s/n 34591 includes all charges	\$514,480.75	\$0.00	\$514,480.75	100%	\$514,480.75
	353	Purch used Auto Transformer 24/40 mva Magntek	\$200,032.04	\$0.00	\$200,032.04	100%	\$200,032.04
	353	Fused Disconnect	\$0.00	\$505.28	(\$505.28)	100%	(\$505.28)
	353	Replace Fused Disconnect	\$434.21	\$0.00	\$434.21	100%	\$434.21
	353	Install & purch EM-GRO Air Compressor	\$1,273.97	\$0.00	\$1,273.97	100%	\$1,273.97
	353	Install Deadend Structure 3-arrestors & 6-bushings	\$30,233.66	\$0.00	\$30,233.66	100%	\$30,233.66
	353	Construct 115 Kv facilities & connect spare transformer	\$0.00	\$0.00	\$0.00	100%	\$0.00
	353	In place of failed #1 autotrans.	\$237,601.84	\$0.00	\$237,601.84	100%	\$237,601.84
	353	Repair and rewind of 115-69 KV #1 Autotransformer	\$0.00	\$0.00	\$0.00	100%	\$0.00
	353	including uprating to a rated capacity of 60/80/100 MVA	\$335,776.00	\$0.00	\$335,776.00	100%	\$335,776.00
	353	Insurance Recovery less deductible of \$25K	(\$321,696.66)	\$0.00	(\$321,696.66)	100%	(\$321,696.66)
	353	Lightning arrestors, delivery and testing	\$6,840.09	\$0.00	\$6,840.09	100%	\$6,840.09
	353	60/80/100 MVA 115-69KV Autotransformer (1996)	\$544,772.08	\$0.00	\$544,772.08	100%	\$544,772.08
	353	Installation cost for above (1996)	\$42,610.39	\$0.00	\$42,610.39	100%	\$42,610.39
	353	89kv Post Insulators	\$7,125.43	\$0.00	\$7,125.43	100%	\$7,125.43
	353	Current Transformers	\$0.00	\$8,000.00	(\$8,000.00)	100%	(\$8,000.00)
Subtotal							\$3,662,458.06
Summer Street - General							
353		705' Chain Link Fence	\$3,261.00	\$0.00	\$3,261.00	21.4% (1)	\$698.79
353		150' Chain Link Fence	\$1,150.43	\$0.00	\$1,150.43	21.4%	\$248.52
353		2 - Flood lights	\$311.00	\$0.00	\$311.00	21.4%	\$66.64
353		Foundation for OCB	\$1,061.00	\$0.00	\$1,061.00	21.4%	\$226.93
353		Foundation for Steel Structure	\$2,545.00	\$0.00	\$2,545.00	21.4%	\$545.36
353		Foundation for Control House	\$961.00	\$0.00	\$961.00	21.4%	\$205.93
353		Foundation for OCB	\$777.00	\$0.00	\$777.00	21.4%	\$166.50
353		Conduit Connection installed	\$509.00	\$0.00	\$509.00	21.4%	\$109.07
353		Control Panel	\$2,992.00	\$0.00	\$2,992.00	21.4%	\$641.14
353		Termination for #06 Line	\$1,303.00	\$0.00	\$1,303.00	21.4%	\$279.21
353		Overheads	\$4,416.00	\$0.00	\$4,416.00	21.4%	\$946.29
353		Foundation	\$1,652.00	\$0.00	\$1,652.00	21.4%	\$354.00

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 47 of 71

**Workpaper 1**  
**Detail of PTF Transmission Plant as of 12/31/97**

Category	Account Subtotal	Description	Amount Added	Amount Retired	Total Plant Balance	PTF Percent	PTF Plant Balance
							\$4,615.38
<b>Summer Street - 69 kV Equipment</b>							
353		4 - Relay GE	\$1,610.00	\$0.00	\$1,610.00	42.9% (2)	\$690.00
353		6 - GE Potential Transformers	\$1,592.00	\$0.00	\$1,592.00	42.9%	\$682.29
353		3 - Switches for Control Power	\$164.00	\$0.00	\$164.00	42.9%	\$70.29
353		Conduit & Control Wiring	\$5,751.00	\$0.00	\$5,751.00	42.9%	\$2,464.71
353		Conductors & Insulators	\$604.00	\$0.00	\$604.00	42.9%	\$254.57
353		3 - GE 2500mva OCB	\$37,901.00	\$0.00	\$37,901.00	42.9%	\$16,243.29
353		Steel Structure	\$9,153.00	\$0.00	\$9,153.00	42.9%	\$3,822.71
353		Control House	\$2,990.00	\$0.00	\$2,990.00	42.9%	\$1,261.43
353		Grounding	\$694.00	\$0.00	\$694.00	42.9%	\$283.14
353		3 - Control Panels	\$9,410.00	\$0.00	\$9,410.00	42.9%	\$4,032.86
353		Conduit & Wiring	\$2,569.00	\$0.00	\$2,569.00	42.9%	\$1,101.00
353		Supervisory Equipment	\$12,037.00	\$0.00	\$12,037.00	42.9%	\$5,158.71
353		Additional Charges	\$3,325.00	\$0.00	\$3,325.00	42.9%	\$1,425.00
353		69kv Bus Insulators & Connectors	\$5,763.00	\$0.00	\$5,763.00	42.9%	\$2,469.86
353		5 - 69kv 1200 amp TPST	\$11,228.00	\$0.00	\$11,228.00	42.9%	\$4,812.00
353		23 - 69kv 600 amp Disconnect Switch	\$7,682.00	\$0.00	\$7,682.00	42.9%	\$3,292.29
353		9 - 69kv Lightning Arrestors	\$3,682.00	\$0.00	\$3,682.00	42.9%	\$1,578.00
353		3 - 69kv Capacitor Devices	\$2,810.00	\$0.00	\$2,810.00	42.9%	\$1,204.29
353		2 - Underfrequency Relays	\$2,249.00	\$0.00	\$2,249.00	42.9%	\$963.86
353		69kv Bus Insulators & Connectors	\$7,183.90	\$0.00	\$7,183.90	42.9%	\$3,078.81
353		Steel Structure	\$7,083.00	\$0.00	\$7,083.00	42.9%	\$3,035.57
353		Grounding	\$538.00	\$0.00	\$538.00	42.9%	\$230.57
353		Control Panels	\$9,067.00	\$0.00	\$9,067.00	42.9%	\$3,865.86
353		Conduit & Wiring	\$675.00	\$0.00	\$675.00	42.9%	\$283.00
353		2 - 69kv Air Break Switches	\$6,128.00	\$0.00	\$6,128.00	42.9%	\$2,626.29
353		9 - 69kv 600 amp Disconnect Switch	\$4,037.00	\$0.00	\$4,037.00	42.9%	\$1,730.14
353		1 - 69kv OCB	\$18,907.00	\$0.00	\$18,907.00	42.9%	\$8,103.00
353		6 - 69kv Lightning Arrestors	\$4,362.00	\$0.00	\$4,362.00	42.9%	\$1,869.43
353		2 - 69kv OCB for #01 Line	\$96,019.79	\$0.00	\$96,019.79	42.9%	\$41,151.34
353		Supervisory Control Recloser Indicator	\$2,696.60	\$0.00	\$2,696.60	42.9%	\$1,242.28
353		Nominal Capacity Lead Antimony Battery	\$1,943.92	\$0.00	\$1,943.92	42.9%	\$833.11
353		2 - Installed 69kv Bus Insulator	\$765.20	\$0.00	\$765.20	42.9%	\$336.51
353		8 - Yuasa Epide batteries for DC Supply	\$3,225.84	\$0.00	\$3,225.84	42.9%	\$1,382.50
	Subtotal						\$122,000.68
<b>#01 &amp; #02 Lines</b>							
356		02 Line	\$34,547.61	\$0.00	\$34,547.61	100%	\$34,547.61
356		01 Line	\$139,411.07	\$0.00	\$139,411.07	100%	\$139,411.07
356		02 Line shield wire 2 wires - 3 No. 6	\$9,919.24	\$0.00	\$9,919.24	100%	\$9,919.24
356		01 Line shield wire 1 wire - 3 No. 6	\$12,961.62	\$0.00	\$12,961.62	100%	\$12,961.62
	Subtotal						\$196,839.54
<b>#01 &amp; #02 Line Poles and Crossarms</b>							
355		02 Line poles and crossarms (See Workpaper A)	\$221,574.99	\$0.00	\$221,574.99	100%	\$221,574.99
355		01 Line poles and crossarms (See Workpaper A)	\$341,628.64	\$0.00	\$341,628.64	100%	\$341,628.64
	Subtotal						\$563,203.63
<b>Land</b>							
350		Cost of Land purchased from New England Power Co.	\$6,663.35	\$0.00	\$6,663.35	91% (3)	\$6,046.32
350		Acquisition Costs for land at Flegg Pond & Beech St. Subs	\$817.70	\$0.00	\$817.70	100%	\$817.70
350		Transmission Land #01, 02 & 06 Lines	\$78,545.00	\$0.00	\$78,545.00	91%	\$71,271.73
350		Transmission ROW #01, 02 & 06 Lines	\$144,391.00	\$0.00	\$144,391.00	91%	\$131,020.39
351		Cleaning on Line #01 Flegg Pond to Summer St. S/S	\$6,654.38	\$0.00	\$6,654.38	100%	\$6,654.38
351		Install gate at both ends of 01 & 02 tap	\$1,381.92	\$0.00	\$1,381.92	100%	\$1,381.92
350		Off Summer St. Fitchburg	\$4,797.00	\$0.00	\$4,797.00	91%	\$4,352.80
350		Crushed Stone for Summer St. S/S yard	\$2,890.00	\$0.00	\$2,890.00	91%	\$2,622.39
350		Grading for Summer St. S/S	\$528.00	\$0.00	\$528.00	91%	\$479.11
	Subtotal						\$224,646.74
	<b>Grand Total</b>						<b>\$4,773,765.23</b>

Notes: (1) Because Summer Street has 69 kV and 13.8 kV plant, Summer Street general plant was first allocated 50% between 13.8 kV and 69 kV. This plant was then allocated to PTF based upon the number of PTF breakers to total 69 kV breakers. (3 out of 7, or 42.9%). Thus, the total allocator = 50% times 42.9% = 21.42%.

(2) Summer Street 69 kV plant was allocated to PTF based upon the number of PTF breakers to total 69 kV breakers. (3 out of 7, or 42.9%).

(3) The 01 & 02 Line ROW's are approximately 73.95 acres, and the 06 Line ROW is approximately 7.55 acres. The PTF percentage, 90.74% (73.95 / 81.50), is used to remove the 06 Line ROW.

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 48 of 71

**Workpaper A**  
**Detail of PTF Transmission Plant as of 12/31/97**  
**01 & 02 Transmission Line Costs (Account #355)**

**01 Line (in-service 1973)**

<u>Item</u>	<u>Total Items (#)</u>	<u>Total Cost of Items (\$)</u>	<u>Cost Per Item (\$)</u>	<u>01 Line Items (#)</u>	<u>01 Line Costs (\$)</u>
45 Ft Poles	7	\$5,140.01	\$734.29	2	\$1,468.57
50 Ft Poles	18	\$7,971.96	\$442.89	4	\$1,771.55
55 Ft Poles	18	\$25,026.46	\$1,390.36	13	\$18,074.67
60 Ft Poles	42	\$70,012.22	\$1,666.96	22	\$36,673.07
65 Ft Poles	47	\$103,127.09	\$2,194.19	16	\$35,107.09
70 Ft Poles	39	\$97,652.55	\$2,503.91	19	\$47,574.32
75 Ft Poles	30	\$87,878.09	\$2,929.27	11	\$32,221.97
80 Ft Poles	5	\$18,850.40	\$3,770.08	5	\$18,850.40
Subtotal:		\$415,658.78			\$191,741.63
Guys (1)		\$44,427.86			\$20,494.38
Crossarms (1)		\$25,359.48			\$11,698.22
Steel Poles & Foundations	14	\$460,578.42	\$32,898.46	3.5	\$115,144.61
Stone & Webster Study (2)	14	\$10,200.00	\$728.57	3.5	\$2,550.00
<b>TOTAL 01 COST</b>					<b>\$341,628.84</b>

**02 Line (in-service 1969)**

<u>Item</u>	<u>Total Items (#)</u>	<u>Total Cost of Items (\$)</u>	<u>Cost Per Item (\$)</u>	<u>02 Line Items (#)</u>	<u>02 Line Costs (\$)</u>
45 Ft Poles	4	\$4,554.46	\$1,138.62	4	\$4,554.46
50 Ft Poles	11	\$10,624.28	\$965.84	8	\$7,726.75
55 Ft Poles	12	\$11,046.00	\$920.50	10	\$9,205.00
60 Ft Poles	25	\$22,927.38	\$917.10	25	\$22,927.38
65 Ft Poles	18	\$14,004.00	\$778.00	18	\$14,004.00
70 Ft Poles	23	\$20,062.24	\$872.27	20	\$17,445.43
75 Ft Poles	21	\$21,576.50	\$1,027.45	17	\$17,466.69
80 Ft Poles	5	\$5,562.00	\$1,112.40	5	\$5,562.00
Subtotal:		\$110,356.86			\$98,891.71
Guys		\$4,821.02			\$4,821.02
Crossarms		\$167.66			\$167.66
Steel Poles & Foundations	14	\$460,578.42	\$32,898.46	3.5	\$115,144.61
Stone & Webster Study (2)	14	\$10,200.00	\$728.57	3.5	\$2,550.00
<b>TOTAL 02 COST</b>					<b>\$221,574.99</b>

- (1) 01 Line costs of Guys and Crossarms are determined based on the ratio of 01 Line pole costs to total pole costs.  
(2) 01 & 02 Line Stone & Webster Study costs are determined based on the ratio of the applicable line's steel pole cost to the total steel pole cost.



DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 49 of 71

## WORKPAPER 2

## Fitchburg Gas and Electric Light Company

## 1997 Cost of Capital

## Pursuant to NEPOOL Open Access Transmission Tariff - ATTACHMENT F

	Amount Outstanding 12/31/97	C.O.C.	Weight	Weighted Cost of Capital
Common Stock Equity	37,907,035	11.50%	51.01%	5.87%
Preferred Stock	2,400,886	6.90%	3.23%	0.22%
Long Term Debt (include. due in 1 yr.)	34,000,000	7.60%	45.76%	3.48%
<b>Total</b>	<b>74,307,921</b>			<b>9.57%</b>

## Common Equity

Common Stock	\$22,629,147
Retained Earnings	16,786,861
Capital Stock Expense	(1,507,083)
Misc. Paid in Capital	(1,890)
<b>Total</b>	<b>\$37,907,035</b>

## Preferred Stock \$100 Par

Series	Amount Outstanding 12/31/97	Annual Issuance Expense	Annual Dividend Expense	Total Annual Cost	Effective Cost %
5.125%	1,034,600	0	53,023	53,023	5.13%
8.00%	1,407,000	0	112,560	112,560	8.00%
	2,441,600	0	165,583	165,583	6.78%
Less: Capital Stock Expense	5.125% 12,784				
	8.00% 27,930				
Subtotal	40,714				
<b>Total</b>	<b>2,400,886</b>				<b>6.90%</b>

## Long Term Debt

Series	Amount Outstanding 12/31/97	Annual Issuance Expense	Annual Interest Expense	Total Annual Cost	Effective Cost %
12 year Notes, due March 31, 2004	8.55% 15,000,000	8,604	1,282,500	1,291,104	8.61%
30 Year Note, due Nov 30, 2023	6.75% 19,000,000	10,673	1,282,500	1,293,173	6.81%
<b>Total</b>	<b>34,000,000</b>	<b>19,277</b>	<b>2,565,000</b>	<b>2,584,277</b>	<b>7.60%</b>

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 50 of 71

FILED  
OFFICE OF THE SECRETARY  
00 JAN 24 PM 3: 14  
FEDERAL ENERGY  
REGULATORY  
COMMISSION

## Attachment E

### Cost Support

### For Proposed Rates

Period 2:  
Effective June 1, 1999

## Summary of Rates

Fitchburg Gas and Electric Light Company  
Summary of Transmission Open Access Rates

	Proposed Period 1 1-Mar-98	Proposed Period 2 1-Jun-99	
Current Revenue Requirement	\$624,122	\$624,122	FG&E OA Tariff, Second Revised Sheet No. 174
Proposed Revenue Requirement	\$115,963	\$544,130	Attachment D and E, Workpaper 1 of 8
Decrease in Revenue Requirement	\$508,159	\$79,992	
FG&E Peak Load	74,000	74,000	Attachment D and E, Workpaper 8 of 8
CP of All Firm Point-to-Point	0	0	
Contract Demand Reservation for Firm Pt-Pt	0	0	
Total	74,000	74,000	Total
<b>Schedule 7: Firm Point-to-Point</b>			<b>Revenue Requirement / Peak Load</b>
Annual Charge \$/kW	\$1,567	\$7,353	Annual Charge / 12
Monthly Charge \$/kW	\$0.131	\$0.613	Annual Charge / 52
Weekly Charge \$/kW	\$0.030	\$0.141	Annual Charge / 365
Daily Charge \$/kW	\$0.004	\$0.020	
<b>Schedule 8: Non-Firm Point-to-Point *</b>			<b>Firm Pt to Pt Charge * 75%</b>
Monthly Charge \$/kW	\$0.098	\$0.460	Firm Pt to Pt Charge * 75%
Weekly Charge \$/kW	\$0.023	\$0.106	Firm Pt to Pt Charge * 75%
Daily Charge \$/kW	\$0.003	\$0.015	Firm Pt to Pt Charge * 75%
Hourly Charge \$/Mwh	\$0.134	\$0.630	Daily Charge / 24 * 1000

\* Rates reflect a 25% discount off the Firm Point-to-Point rates

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 52 of 71

Non-PTF Revenue Requirements  
Worksheet 1 of 8

**Fitchburg Gas and Electric Light Company**  
**Annual Revenue Requirements of Non-PTF Facilities**  
for costs in 1997

Sheet: Worksheet 1

NEPOOL OA		FG&E		Total	Reference
Tariff					
Attachment F					
Line No.	Section	Reference	Section	Reference	
1	1. INVESTMENT BASE	(A)(1)(a)	4,236,176	4,236,176	Worksheet 3, line 1 column 5
2	Transmission Plant	(A)(1)(b)	6,710	6,710	Worksheet 3, line 2 column 5
3	General Plant	(A)(1)(c)	180	180	Worksheet 3, line 4 column 5
4	Plant Held For Future Use				
5	Total Plant (Lines 1-2+3)		4,243,066	4,243,066	
6	Accumulated Depreciation	(A)(1)(d)	1,805,209	1,805,209	Worksheet 3, line 7 column 5
7	Accumulated Deferred Income Taxes	(A)(1)(e)	739,960	739,960	Worksheet 3, line 10 column 5, Changed Formula to +, not -
8	Loss On Recaptured Debt	(A)(1)(f)	0	0	Worksheet 3, line 11 column 5
9	Other Regulatory Assets	(A)(1)(g)	289,838	289,838	Worksheet 3, line 14 column 5
10	Net Investment (Line 4-5-6-7-8)		1,987,735	1,987,735	
11	Prepayments	(A)(1)(h)	16,828	16,828	Worksheet 3, line 15 column 5
12	Materials & Supplies	(A)(1)(i)	7,178	7,178	Worksheet 3, line 16 column 5
13	Cash Working Capital	(A)(1)(j)	12,620	12,620	Worksheet 3, line 23 column 5
	Total Investment Base (Line 9-10+11-12)		2,024,361	2,024,361	
14	REVENUE REQUIREMENTS	(A)	268,178	268,178	Worksheet 2
15	Investment Return and Income Taxes	(B)	113,216	113,216	Worksheet 4, line 3 column 5
16	Depreciation Expense	(C)	0	0	Worksheet 4, line 4 column 5
17	Amortization of Loss on Recaptured Debt	(D)	(3,302)	(3,302)	Worksheet 4, line 5 column 5
18	Investment Tax Credit	(E)	64,008	64,008	Worksheet 4, line 8 column 5
19	Property Tax Expense	(F)	1,071	1,071	Worksheet 4, line 17 column 5
20	Payroll Tax Expense	(G)	78,148	78,148	Worksheet 4, line 13 column 5
21	Operation & Maintenance Expense	(H)	22,811	22,811	Worksheet 4, line 16 column 5
22	Administrative & General Expense	(I)	0	0	Worksheet 7
23	Transmission Related Integrated Facilities Charge	(J)	0	0	Worksheet 7
24	Transmission Support Revenue	(K)	0	0	Worksheet 7
25	Transmission Support Expense	(L)	0	0	Worksheet 7
26	Transmission Related Expense from Generators	(M)	0	0	
27	Transmission Related Taxes and Fees Charge	(N)	0	0	
28	Revenue for ST Trans. Services Under NEPOOL Tariff	(O)	0	0	
29	Transmission Rents Received from Electric Property		544,130	544,130	

DTE 02-24/25 (Electric)

Attachment AG-5-7

Page 53 of 71

Non-PTF Revenue Requirements  
Worksheet 2 of 8

**Fitchburg Gas and Electric Light Company**  
Annual Revenue Requirements  
for costs in 1997

Sheet: Worksheet 2

Shading denotes an input

	CAPITALIZATION 12/31/97	CAPITALIZATION RATIOS	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION
LONG-TERM DEBT	\$ 34,000,000	45.76%	7.60%	3.48%	0.22%
PREFERRED STOCK	2,400,886	3.23%	6.90%	0.22%	5.87%
COMMON EQUITY	37,907,035	51.01%	11.50%	5.87%	6.09%
TOTAL INVESTMENT RETURN	\$ 74,307,921	100.00%		9.57%	

\*See Worksheet 2

**Cost of Capital Rates**

(a) Weighted Cost of Capital	=	0.0957
(b) Federal Income Tax	=	$\frac{R.O.E. + \left( \frac{\text{Non-PTF Inv. (Tax Credit + Eq. AFUDC of Deprec. Exp.)}{\text{PTF Inv. Base}} \right)}{1}$
	=	$\frac{0.0609 + \left( \frac{(3,302) + 0}{2,024,361} \right)}{1} = 0.0305324$
(c) State Income Tax	=	$\frac{R.O.E. + \left( \frac{\text{Non-PTF Inv. (Tax Credit + Eq. AFUDC of Deprec. Exp.)}{\text{PTF Inv. Base}} \right)}{1}$
	=	$\frac{0.0609 + \left( \frac{(3,302) + 0}{2,024,361} \right)}{1} = 0.0305324$
	=	0.0062429

$$(a) + (b) + (c) \text{ Cost of Capital Rate} = 0.1324753$$

INVESTMENT BASE	\$ 2,024,361	From Worksheet 1
x Cost of Capital Rate	0.1324753	
= Investment Return and Income Taxes	268,178	To Worksheet 1



**Fitchburg Gas and Electric Light Company**

Total		159,548	To Line 23
-------	--	---------	------------

(e) Electric Only (Gas Portion Removed)  
 \* Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 56 of 71

Non-PTF Revenue Requirements  
Worksheet 5 of 8

FERC Form 1  
Reference

Worksheet 1 - Summary  
Page 207.53g

Page 354.18b  
Worksheet 6 of 8

Page 354.25b + Line 5  
Page 354.24b  
Worksheet 6 of 8

Page 207.53g  
Worksheet 3, Line 2

Page 207.85g

Sheet: Worksheet 5

Shading denotes an input

Line  
No.

FG&E

4,238,176  
9,443,402  
44,8586%

21,959  
0  
21,959

1,595,131  
127,200  
0  
1,467,931

1.4959%

9,443,402  
14,959  
9,458,361

70,083,144  
13.4959%

Non - PTF Transmission Plant Allocation Factor

- 1 Non - PTF Transmission Investment  
2 Total Transmission Investment  
3 Percent Allocation (Line 1/Line 2)

Transmission Wages and Salaries Allocation Factor

- 4 Direct Transmission Wages and Salaries  
5 Affiliated Company Transmission Wages and Salaries  
6 Total Transmission Wages and Salaries (Line 4 + Line 5)  
7 Total Wages and Salaries  
8 Administrative and General Wages and Salaries  
9 Affiliated Company Wages and Salaries less A&G  
10 Total Wages and Salaries net of A&G (Line 7 - 8 + 9)  
11 Percent Allocation (Line 6/Line 10)

Plant Allocation Factor

- 12 Total Transmission Investment  
13 plus Transmission-Related General Plant (Line 2 of Wkst. 3)  
14 = Revised Numerator (Line 12 + Line 13)  
15 Total Plant in Service  
16 Percent Allocation (Line 14 / Line 15)



DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 57 of 71

Non-PTF Revenue Requirements  
Worksheet 6 of 8

Sheet: Worksheet 6

## Affiliated Company Wages and Salaries

Shading denotes an input

Line		FG&E
<b>"Affiliated" Transmission Wages and Salaries</b>		
#560 - 573		
1	560	0
2	562	0
3	564	0
4	566	0
5	568	0
6	569	0
7	570	0
8	571	0
9	572	0
10	573	0
11 = 1 thru 10	Total Transmission	0
12 = Total "Affiliated" Wages and Salaries		0
<b>Less "Affiliated" Administrative and General Salaries</b>		
#920 - 935		
13	920	0
14	921	0
15	923	0
16	925	0
17	926	0
18	928	0
19	930	0
20	935	0
21 = 13 thru 20		0
22 = 12 less 21	Total "Affiliated" less A&G	0

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 58 of 71

Non-PTF Revenue Requirements  
Worksheet 7 of 8

Sheet Worksheet 7

Not applicable to Non-PTF Costs

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

Participant	PTF Supporting Facilities	FG&E		TOTAL	
		Revenues (a)	Expenses (b)	Revenues (a)	Expenses (b)
BECO	345 kV Sherman - Medway 336 line				
	115 kV Somerville 402 Substation				
	115/345 kV North Cambridge 509 Substation				
	345 kV Golden Hills - Myatic 389 [x&y] line				
	West Medway 345 kV breaker				
	115 kV Millbury-Medway 201 line				
	HQ Phase II - AC in MA	0	0	0	0
	345 kV "stabilizer" 342 line				
	345 kV Walpole - Medway 325 line				
	345 kV Carver - Walpole 331 line				
CEC	345 kV Jordan Rd - Canal 342 line				
	Second Canal line				
	345 kV Piglin-Bridgewater - 355 line				
	345 kV Myles Standish - Canal 342 line				
CMP	345 kV Buxton-South Goham 380 line				
	115 kV Wymen 164-167 lines				
	115 kV Maine Yankee transmission				
EUA	345 kV Carver - Walpole 331 line				
	345 kV Medway - Bridgewater 344 Line				
	Northern Rhode Island transmission				
	Chester SVC				
	Cornford 115 kV Substation				
NEP	345 kV Sandy-Tewksbury 337 line				
	345 kV Tewksbury-Woburn 338 line				
	115 kV Tewksbury - Woburn M139 line				
	115 kV Tewksbury - Woburn N140 line				
	Moore 115 kV Substation				
	HQ Phase II - AC in MA	0	0	0	0
	345 kV Golden Hills-Myatic 349 line				
	345 kV NH/MA border-Tewksbury 394 line				
NU	115 kV Reed - Washington V148 line				
	345 kV 363, 369 and 394 Seabrook lines				
	Fairmont 115 kV Substation				
	345 kV Millstone-Manchester 310 line				
	UI Substations				
	Black Pond				
Total =		0	0	0	0

Amount by which Support Expense exceeds Support Revenues  
(To Worksheet 3, Line 21, Column 5)

0

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 59 of 71

LNS Rate  
Worksheet 8 of 8

Sheet: Worksheet 8

**Summary of Fitchburg Gas and Electric Light Company System  
Monthly Coincident Peaks for 1997  
(Megawatts)**

Shading denotes an input

	JAN '97	FEB '97	MAR '97	APR '97	MAY '97	JUN '97	JUL '97	AUG '97	SEP '97	OCT '97	NOV '97	DEC '97
Day	8	4	14	2	6	26	15	11	2	29	25	22
Hour	18:00	18:00	19:00	20:00	18:00	11:00	12:00	17:00	14:00	18:00	18:00	19:00
FG&E	78	78	74	69	66	74	81	77	70	71	77	77

Annual FG&E System Average 12 CP Load **74**

NOTE: Numbers represent FERC Form 1 Pages 401/401A coincident peaks.

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 60 of 71

LNS Rate  
Worksheet 8 of 8

**Summary of Fitchburg Gas and Electric Light Company System  
Monthly Coincident Peaks for 1997  
(Megawatts)**

Shading denotes an input

	JAN '97	FEB '97	MAR '97	APR '97	MAY '97	JUN '97	JUL '97	AUG '97	SEP '97	OCT '97	NOV '97	DEC '97
Day	8	4	14	2	6	26	15	11	2	29	25	22
Hour	18:00	18:00	19:00	20:00	18:00	11:00	12:00	17:00	14:00	18:00	18:00	19:00
FG&E	78	76	74	74	69	66	74	81	77	70	71	77

Annual FG&E System Average 12 CP Load **74**

NOTE: Numbers represent FERC Form 1 Pages 401/401A coincident peaks.

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 61 of 71

Worksheet 1 - Summary  
For Rates Effective June 1, 1999

Total Transmission Plant	<u>12/31/97 Balances</u>	Detail of Transmission Plant (per FERC's Seven Part T&D Facility Test), Page 4 of 4
	\$ 5,815,064	
Less:		
Transmission Plant (Joint Owned Units) (1)	\$ 138,492	Detail of Transmission Plant (per FERC's Seven Part T&D Facility Test), Page 4 of 4
Pool Transmission Facilities Plant	\$ 1,440,396	Detail of PTF Transmission Plant, Incorporating effects reclassification of PTF to Non-PTF
Non-Pool Transmission Facilities Plant	\$ 4,236,176	

(1) External to FG&E Transmission System

**Workpaper 1**  
**Detail of Transmission Plant as of 12/31/97**  
**(Per FERC's Seven Part T&D Facility Test)**

Category	Account	Description	Amount Added	Amount Retired	Total Plant Balance	Transmission Percent	Transmission Plant Balance
<b>Flagg Pond</b>							
	353	Purchased from New England Power on 6/1/77	\$1,272,305.18	\$0.00	\$1,272,305.18	100%	\$1,272,305.18
	353	Transfer acquisition costs to acct 2-353-99	(\$84,274.29)	\$0.00	(\$84,274.29)	100%	(\$84,274.29)
	353	Retire 2 600 amp OCB plus installation	\$0.00	\$21,975.62	(\$21,975.62)	100%	(\$21,975.62)
	353	Install 115kv breaker status for REMVEC	\$14,556.40	\$0.00	\$14,556.40	100%	\$14,556.40
	353	See F-2172	\$937,758.94	\$12,809.54	\$924,949.40	100%	\$924,949.40
	353	Install 2 1000w Lucalox Floodlights near control shack	\$2,938.12	\$0.00	\$2,938.12	100%	\$2,938.12
	353	Install Potential Transformers	\$21,174.57	\$0.00	\$21,174.57	100%	\$21,174.57
	353	Retire PT	\$0.00	\$4,628.41	(\$4,628.41)	100%	(\$4,628.41)
	353	Metering	\$41,916.83	\$0.00	\$41,916.83	100%	\$41,916.83
	353	Install #27 & #28 airbreak switch on #2 Feeder	\$17,310.44	\$0.00	\$17,310.44	100%	\$17,310.44
	353	Retire #27 & #28 airbreak switch on #2 Feeder	\$0.00	\$5,762.36	(\$5,762.36)	100%	(\$5,762.36)
	353	Adjust to above entry	\$183.25	\$0.00	\$183.25	100%	\$183.25
	353	Install PT on O2 Line	\$8,435.83	\$0.00	\$8,435.83	100%	\$8,435.83
	353	Retire PT on O2 Line	\$0.00	\$21,174.57	(\$21,174.57)	100%	(\$21,174.57)
	353	Install 2016 of 4/0 st bare copper	\$1,868.89	\$0.00	\$1,868.89	100%	\$1,868.89
	353	Install 50' of 2" PVC Pipe	\$4,033.47	\$0.00	\$4,033.47	100%	\$4,033.47
	353	785' of 4/0 st 600 volt	\$0.00	\$1,198.75	(\$1,198.75)	100%	(\$1,198.75)
	353	50' of 4/0 wire	\$0.00	\$31.55	(\$31.55)	100%	(\$31.55)
	353	760' of 4/0 hard drawn wire	\$0.00	\$1,310.88	(\$1,310.88)	100%	(\$1,310.88)
	353	50' of 4/0 wire	\$0.00	\$106.74	(\$106.74)	100%	(\$106.74)
	353	965' of 4/0 wire	\$0.00	\$2,876.75	(\$2,876.75)	100%	(\$2,876.75)
	353	50' of 2" PVC Pipe	\$0.00	\$164.50	(\$164.50)	100%	(\$164.50)
	353	GE 69kv Bushing in OCB s/n 0139A4928-201	\$0.00	\$14,231.56	(\$14,231.56)	100%	(\$14,231.56)
	353	69kv 1200amp bushing in OCB	\$2,405.57	\$0.00	\$2,405.57	100%	\$2,405.57
	353	Data Star Recorders	\$3,780.00	\$0.00	\$3,780.00	100%	\$3,780.00
	353	Installed Data Star Recorder Software Level #2	\$750.00	\$0.00	\$750.00	100%	\$750.00
	353	Payroll & overheads for above install	\$1,014.38	\$0.00	\$1,014.38	100%	\$1,014.38
	353	Recorder Tape System GE	\$0.00	\$5,300.00	(\$5,300.00)	100%	(\$5,300.00)
	353	Universal Mag Tape Cartridges	\$0.00	\$637.20	(\$637.20)	100%	(\$637.20)
	353	Watt/Var Transducer	\$5,950.00	\$0.00	\$5,950.00	100%	\$5,950.00
	353	Volt Transducer	\$185.00	\$0.00	\$185.00	100%	\$185.00
	353	Shipping & Handling	\$34.92	\$0.00	\$34.92	100%	\$34.92
	353	500' 4/C #12 AWG Control Cable	\$1,142.10	\$0.00	\$1,142.10	100%	\$1,142.10
	353	50' 1/2 watt precision resistors	\$41.39	\$0.00	\$41.39	100%	\$41.39
	353	350' T&B Stakon Terminals	\$86.45	\$0.00	\$86.45	100%	\$86.45
	353	69' Copper Wire	\$10.35	\$0.00	\$10.35	100%	\$10.35
	353	Cable Tie	\$17.55	\$0.00	\$17.55	100%	\$17.55
	353	Misc Parts	\$52.76	\$0.00	\$52.76	100%	\$52.76
	353	Labor for fixing recorder	\$368.80	\$0.00	\$368.80	100%	\$368.80
	353	Labor for wiring	\$124.20	\$0.00	\$124.20	100%	\$124.20
	353	Install GETEC Telemetry to REMVAC (Liabilities)	\$422.31	\$0.00	\$422.31	100%	\$422.31
	353	Overheads	\$6,638.54	\$0.00	\$6,638.54	100%	\$6,638.54
	353	Payroll	\$8,030.61	\$0.00	\$8,030.61	100%	\$8,030.61
	353	Bristol DPC 333010A computer	\$4,230.71	\$0.00	\$4,230.71	100%	\$4,230.71
	353	Bristol SLC 371140A Recorders	\$5,771.41	\$0.00	\$5,771.41	100%	\$5,771.41
	353	Bristol Power Supply	\$515.05	\$0.00	\$515.05	100%	\$515.05
	353	Labor to set up Bristol	\$2,355.00	\$0.00	\$2,355.00	100%	\$2,355.00
	353	Spare Interrupter Assembly for 115kv Circuit breaker	\$9,512.00	\$0.00	\$9,512.00	100%	\$9,512.00
	353	Retire Westinghouse auto transformer	\$0.00	\$152,101.77	(\$152,101.77)	100%	(\$152,101.77)
	353	Redesign Rewind & Rebuild 30/40/50 MVA West	\$0.00	\$0.00	\$0.00	100%	\$0.00
	353	Auto Transformer s/n 34891 includes all charges	\$514,480.75	\$0.00	\$514,480.75	100%	\$514,480.75
	353	Purch used Auto Transformer 24/40 mva Magtek	\$200,032.04	\$0.00	\$200,032.04	100%	\$200,032.04
	353	For future costs assoc. w/ additions 69kv connections	(\$97,766.02)	\$0.00	(\$97,766.02)	100%	(\$97,766.02)
	353	Fused Disconnect	\$0.00	\$505.26	(\$505.26)	100%	(\$505.26)
	353	Replace Fused Disconnect	\$434.21	\$0.00	\$434.21	100%	\$434.21
	353	Install & purch EM-GRO Air Compressor	\$1,273.97	\$0.00	\$1,273.97	100%	\$1,273.97
	353	Install Deadend Structure 3-arrestors & 6-bushings	\$30,233.66	\$0.00	\$30,233.66	100%	\$30,233.66
	353	Construct 115 Kv facilities & connect spare transformer	\$0.00	\$0.00	\$0.00	100%	\$0.00
	353	in place of failed #1 autotrans.	\$237,601.84	\$0.00	\$237,601.84	100%	\$237,601.84
	353	Repair and rewind of 115-69 KV #1 Autotransformer	\$0.00	\$0.00	\$0.00	100%	\$0.00
	353	including uprating to a rated capacity of 60/80/100 MVA	\$335,776.00	\$0.00	\$335,776.00	100%	\$335,776.00
	353	Insurance Recovery less deductible of \$25K	(\$321,696.66)	\$0.00	(\$321,696.66)	100%	(\$321,696.66)
	353	Lightning arrestors, delivery and testing	\$6,840.09	\$0.00	\$6,840.09	100%	\$6,840.09
	353	60/80/100 MVA 115-69KV Autotransformer	\$544,772.08	\$0.00	\$544,772.08	100%	\$544,772.08
	353	Installation cost for above	\$42,610.39	\$0.00	\$42,610.39	100%	\$42,610.39
	353	69kv Post Insulators	\$7,125.43	\$0.00	\$7,125.43	100%	\$7,125.43
	353	Current Transformers	\$0.00	\$8,000.00	(\$8,000.00)	100%	(\$8,000.00)
	Subtotal						\$3,540,549.05
<b>Flagg Pond</b>							
	352		\$24,143.99	\$0.00	\$24,143.99	100%	\$24,143.99
	Subtotal						\$24,143.99
<b>Summer Street</b>							
	353	705' Chain Link Fence	\$3,261.00	\$0.00	\$3,261.00	100%	\$3,261.00
	353	158' Chain Link Fence	\$1,150.43	\$0.00	\$1,150.43	100%	\$1,150.43
	353	4 - Relay GE	\$1,610.00	\$0.00	\$1,610.00	100%	\$1,610.00
	353	6 - GE Potential Transformers	\$1,592.00	\$0.00	\$1,592.00	100%	\$1,592.00
	353	3 - Switches for Control Power	\$164.00	\$0.00	\$164.00	100%	\$164.00
	353	Conduit & Control Wiring	\$5,751.00	\$0.00	\$5,751.00	100%	\$5,751.00

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 63 of 71

**Detail of Transmission Plant as of 12/31/97  
(Per FERC's Seven Part T&D Facility Test)**

Category	Account	Description	Amount Added	Amount Retired	Total Plant Balance	Transmission Percent	Transmission Plant Balance
353	Conductors & Insulators		\$804.00	\$0.00	\$804.00	100%	\$804.00
353	Transformer Foundation		\$892.00	\$0.00	\$892.00	100%	\$892.00
353	Switchgear Foundation		\$892.00	\$0.00	\$892.00	100%	\$892.00
353	Reactor Foundation		\$892.00	\$0.00	\$892.00	100%	\$892.00
353	Neutral Resistor Foundation		\$446.00	\$0.00	\$446.00	100%	\$446.00
353	General Electric 21000/28000/35000MVA Power Transforme		\$66,743.00	\$0.00	\$66,743.00	100%	\$66,743.00
353	3 - GE 600 Amp 300 Volt outdoor Reactor		\$4,674.00	\$0.00	\$4,674.00	100%	\$4,674.00
353	2 - GE 1200 amp 14.4KV oil Circuit Breaker		\$10,731.00	\$0.00	\$10,731.00	100%	\$10,731.00
353	37 - Disconnect Switches		\$6,014.00	\$0.00	\$6,014.00	100%	\$6,014.00
353	24 - Tandem Transfer Switches		\$3,009.00	\$0.00	\$3,009.00	100%	\$3,009.00
353	24 - 15kv valve Lightning Arresters		\$3,215.00	\$0.00	\$3,215.00	100%	\$3,215.00
353	Grounding Material Installed		\$1,601.00	\$0.00	\$1,601.00	100%	\$1,601.00
353	Bus Connections 13.8kv Installed		\$6,554.76	\$0.00	\$6,554.76	100%	\$6,554.76
353	GE Neutral Resistor		\$10,825.00	\$0.00	\$10,825.00	100%	\$10,825.00
353	GE Oil Circuit Breaker		\$260.00	\$0.00	\$260.00	100%	\$260.00
353	GE Protected Aisle Switchgear		\$19,645.00	\$0.00	\$19,645.00	100%	\$19,645.00
353	18 - Poles installed Terminations of 13.8kv Feeder in S/S		\$1,571.00	\$0.00	\$1,571.00	100%	\$1,571.00
353	62 - Crossarms		\$918.00	\$0.00	\$918.00	100%	\$918.00
353	200' - 336.4MCM Alum wire		\$2,472.00	\$0.00	\$2,472.00	100%	\$2,472.00
353	12 - Anchor guys		\$311.00	\$0.00	\$311.00	100%	\$311.00
353	4 - 600 amp Oil Circuit Breakers 250 MBA 14.4kv		\$20,433.00	\$0.00	\$20,433.00	100%	\$20,433.00
353	2 - Recloser installed		\$11,622.00	\$0.00	\$11,622.00	100%	\$11,622.00
353	1 - 18' Switch Stick		\$88.00	\$0.00	\$88.00	100%	\$88.00
353	2 - Flood lights		\$311.00	\$0.00	\$311.00	100%	\$311.00
353	2 - Indicators on cooling fans of transformer & oil pump		\$75.00	\$0.00	\$75.00	100%	\$75.00
353	Foundation for OCB		\$1,661.00	\$0.00	\$1,661.00	100%	\$1,661.00
353	Foundation for Steel Structure		\$2,545.00	\$0.00	\$2,545.00	100%	\$2,545.00
353	Foundation for Control House		\$961.00	\$0.00	\$961.00	100%	\$961.00
353	3 - GE 2500mva OCB		\$37,901.00	\$0.00	\$37,901.00	100%	\$37,901.00
353	Steel Structure		\$9,153.00	\$0.00	\$9,153.00	100%	\$9,153.00
353	Control House		\$2,990.00	\$0.00	\$2,990.00	100%	\$2,990.00
353	Grounding		\$894.00	\$0.00	\$894.00	100%	\$894.00
353	3 - Control Panels		\$9,410.00	\$0.00	\$9,410.00	100%	\$9,410.00
353	Conduit & Wiring		\$2,569.00	\$0.00	\$2,569.00	100%	\$2,569.00
353	Supervisory Equipment		\$12,037.00	\$0.00	\$12,037.00	100%	\$12,037.00
353	Additional Charges		\$3,325.00	\$0.00	\$3,325.00	100%	\$3,325.00
353	69kv Bus Insulators & Connectors		\$5,763.00	\$0.00	\$5,763.00	100%	\$5,763.00
353	5 - 69kv 1200 amp TPST		\$11,228.00	\$0.00	\$11,228.00	100%	\$11,228.00
353	23 - 69kv 600 amp Disconnect Switch		\$7,682.00	\$0.00	\$7,682.00	100%	\$7,682.00
353	9 - 69kv Lightning Arresters		\$3,682.00	\$0.00	\$3,682.00	100%	\$3,682.00
353	3 - 69kv Capacitor Devices		\$2,810.00	\$0.00	\$2,810.00	100%	\$2,810.00
353	Foundation for OCB		\$777.00	\$0.00	\$777.00	100%	\$777.00
353	Conduit Connection installed		\$509.00	\$0.00	\$509.00	100%	\$509.00
353	Control Panel		\$2,992.00	\$0.00	\$2,992.00	100%	\$2,992.00
353	Termination for #08 Line		\$1,303.00	\$0.00	\$1,303.00	100%	\$1,303.00
353	Overheads		\$4,416.00	\$0.00	\$4,416.00	100%	\$4,416.00
353	1 - 69kv OCB		\$16,347.00	\$0.00	\$16,347.00	100%	\$16,347.00
353	Overheads		\$670.00	\$0.00	\$670.00	100%	\$670.00
353	2 - Underfrequency Relays		\$2,249.00	\$0.00	\$2,249.00	100%	\$2,249.00
353	Foundation		\$1,652.00	\$0.00	\$1,652.00	100%	\$1,652.00
353	69kv Bus Insulators & Connectors		\$7,183.90	\$0.00	\$7,183.90	100%	\$7,183.90
353	Steel Structure		\$7,083.00	\$0.00	\$7,083.00	100%	\$7,083.00
353	Grounding		\$538.00	\$0.00	\$538.00	100%	\$538.00
353	Control Panels		\$9,067.00	\$0.00	\$9,067.00	100%	\$9,067.00
353	Conduit & Wiring		\$875.00	\$0.00	\$875.00	100%	\$875.00
353	2 - 69kv Air Break Switches		\$6,128.00	\$0.00	\$6,128.00	100%	\$6,128.00
353	9 - 69kv 600 amp Disconnect Switch		\$4,037.00	\$0.00	\$4,037.00	100%	\$4,037.00
353	1 - 69kv OCB		\$18,907.00	\$0.00	\$18,907.00	100%	\$18,907.00
353	6 - 69kv Lightning Arresters		\$4,362.00	\$0.00	\$4,362.00	100%	\$4,362.00
353	1 - Electric Heater in 13.8KV Switchgear cabin		\$260.12	\$0.00	\$260.12	100%	\$260.12
353	6 - Bushings 2000amp 13.8kv high volt for roof of building		\$4,093.17	\$0.00	\$4,093.17	100%	\$4,093.17
353	3 - Bushing on GE Oil Circuit Breakers on #3 & #40 feeder		\$1,257.58	\$0.00	\$1,257.58	100%	\$1,257.58
353	Transformer Replacement		\$937.01	\$0.00	\$937.01	100%	\$937.01
353	Transformer Lightning Arrester replaced		\$399.55	\$0.00	\$399.55	100%	\$399.55
353	2 - 69kv OCB for #01 Line		\$96,019.79	\$0.00	\$96,019.79	100%	\$96,019.79
353	Supervisory Control Recloser Indicator		\$2,898.60	\$0.00	\$2,898.60	100%	\$2,898.60
353	Install 540' of #12-7 conductor to Robin Hood Park		\$841.90	\$0.00	\$841.90	100%	\$841.90
353	Nominal Capacity Lead Antimony Battery		\$1,943.92	\$0.00	\$1,943.92	100%	\$1,943.92
353	3 - 600 amp 13.8kv outdoor reactors		\$15,085.31	\$0.00	\$15,085.31	100%	\$15,085.31
353	6 - Bushings for #40-10 3 oil circuit breaker		\$3,096.35	\$0.00	\$3,096.35	100%	\$3,096.35
353	FERC Adjustment		(\$79.00)	\$0.00	(\$79.00)	100%	(\$79.00)
353	Install 2x2 plywood board in control house		\$618.78	\$0.00	\$618.78	100%	\$618.78
353	Capacitor Bank 36 - 200Kvar Cap Units		\$75,309.61	\$0.00	\$75,309.61	100%	\$75,309.61
353	Additions		\$10,968.78	\$0.00	\$10,968.78	100%	\$10,968.78
353	Additions		\$11,232.45	\$0.00	\$11,232.45	100%	\$11,232.45
353	Purch of McGraw Edison UCR Oil Switch		\$4,169.15	\$0.00	\$4,169.15	100%	\$4,169.15
353	2 - Installed 69kv Bus Insulator		\$785.20	\$0.00	\$785.20	100%	\$785.20
353	8 - Yuasa Epide batteries for DC Supply		\$3,225.84	\$0.00	\$3,225.84	100%	\$3,225.84
353	Install stage Regulator & Nitro tanks to transformer		\$845.22	\$0.00	\$845.22	100%	\$845.22
353	Remove & install new #2 Capacitor Switch		\$691.47	\$0.00	\$691.47	100%	\$691.47
353	Bar Gate installation		\$2,440.00	\$0.00	\$2,440.00	100%	\$2,440.00
353	Disconnect Switches		\$6,455.87	\$0.00	\$6,455.87	100%	\$6,455.87
353	Disconnect Switches			\$975.24	(\$975.24)	100%	(\$975.24)
353	Pin Insulator		\$946.93		\$946.93	100%	\$946.93
353	Epoxiators		\$2,113.14		\$2,113.14	100%	\$2,113.14

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 64 of 71

**Detail of Transmission Plant as of 12/31/97  
(Per FERC's Seven Part T&D Facility Test)**

Category	Account	Description	Amount Added	Amount Retired	Total Plant Balance	Transmission Percent	Transmission Plant Balance
<b>Subtotal</b>							<b>\$637,815.59</b>
<b>#01 &amp; #02 Lines</b>							
	356	02 Line conductor 1969 556.7 MCM	\$34,547.61	\$0.00	\$34,547.61	100%	\$34,547.61
	356	01 Line conductor 1973 556.7 MCM	\$139,411.07	\$0.00	\$139,411.07	100%	\$139,411.07
	356	02 Line shield wire 1969 2 wires - 3 No. 6	\$9,919.24	\$0.00	\$9,919.24	100%	\$9,919.24
	356	01 Line shield wire 1973 1 wire - 3 No. 6	\$12,961.62	\$0.00	\$12,961.62	100%	\$12,961.62
<b>Subtotal</b>							<b>\$196,839.54</b>
<b>#01 &amp; #02 Line Poles and Xarms</b>							
	355	02 Line poles 1969 (Itemized list GHH)	\$221,574.99	\$0.00	\$221,574.99	100%	\$221,574.99
	355	01 Line poles 1969 (Itemized list GHH)	\$341,628.84	\$0.00	\$341,628.84	100%	\$341,628.84
<b>Subtotal</b>							<b>\$563,203.83</b>
<b>Electric Station</b>							
	353	Special Transformer Inclosure	\$146.57	\$0.00	\$146.57	100%	\$146.57
	353	Fence	\$506.71	\$0.00	\$506.71	100%	\$506.71
	353	Concrete Mat for transformer	\$980.23	\$0.00	\$980.23	100%	\$980.23
	353	5000kva GE 3 Phase transformer	\$15,568.02	\$0.00	\$15,568.02	100%	\$15,568.02
	353	Install Transformer	\$1,727.22	\$0.00	\$1,727.22	100%	\$1,727.22
	353	Reinforce foundation	\$3,271.47	\$0.00	\$3,271.47	100%	\$3,271.47
	353	15' - fence	\$868.20	\$0.00	\$868.20	100%	\$868.20
	353	13kv cable connections to switchgear	\$1,859.53	\$0.00	\$1,859.53	100%	\$1,859.53
	353	5000kva GE 3 Phase transformer	\$17,995.96	\$0.00	\$17,995.96	100%	\$17,995.96
	353	Foundation	\$4,086.42	\$0.00	\$4,086.42	100%	\$4,086.42
	353	Install Transformer	\$900.53	\$0.00	\$900.53	100%	\$900.53
	353	13.8kv cable connections to switchgear	\$3,854.34	\$0.00	\$3,854.34	100%	\$3,854.34
	353	5 kv bus duct installed	\$10,797.32	\$0.00	\$10,797.32	100%	\$10,797.32
	353	Eastern Fence 12' double drive gate & posts	\$149.00	\$0.00	\$149.00	100%	\$149.00
	353	69kv Power Transformer & Foundation	\$101,768.00	\$0.00	\$101,768.00	100%	\$101,768.00
	353	Galv Steel Terminating Structure	\$8,099.00	\$0.00	\$8,099.00	100%	\$8,099.00
	353	Ins & misc connections installed	\$733.00	\$0.00	\$733.00	100%	\$733.00
	353	3x8 Lighted Sign	\$282.00	\$0.00	\$282.00	100%	\$282.00
	353	Additional 1800 Kvar of capacitors in bank	\$52,613.25	\$0.00	\$52,613.25	100%	\$52,613.25
	353	Auxiliary Current transformer	\$2,104.00	\$0.00	\$2,104.00	100%	\$2,104.00
	353	West. differential relays	\$348.00	\$0.00	\$348.00	100%	\$348.00
	353	Lockout & auxiliary relays	\$1,447.00	\$0.00	\$1,447.00	100%	\$1,447.00
	353	15 kv current Transformers	\$1,260.00	\$0.00	\$1,260.00	100%	\$1,260.00
	353	Annunciators installed	\$669.00	\$0.00	\$669.00	100%	\$669.00
	353	13kv Potential transformer	\$3,763.00	\$0.00	\$3,763.00	100%	\$3,763.00
	353	Central Wiring	\$4,074.00	\$0.00	\$4,074.00	100%	\$4,074.00
	353	West 450kva Current Limiting reactor	\$6,988.00	\$0.00	\$6,988.00	100%	\$6,988.00
	353	Change range of Speedomax Lead & Northrup Recorder	\$365.00	\$0.00	\$365.00	100%	\$365.00
	353	GE Auxiliary transformer & Relays	\$3,295.00	\$0.00	\$3,295.00	100%	\$3,295.00
	353	Speedomax Recorder Leeds & Northrup	\$1,378.00	\$0.00	\$1,378.00	100%	\$1,378.00
	353	Thermal Converter	\$457.00	\$0.00	\$457.00	100%	\$457.00
	353	Parts to change range of thermal converter	\$1,169.00	\$0.00	\$1,169.00	100%	\$1,169.00
	353	Converting range on Speedomax	\$333.00	\$0.00	\$333.00	100%	\$333.00
	353	Converting range on Speedomax	\$288.00	\$0.00	\$288.00	100%	\$288.00
	353	Converting range on Speedomax	\$332.00	\$0.00	\$332.00	100%	\$332.00
	353	Amplifier Leeds & Northrup to be used with Speedomax	\$158.00	\$0.00	\$158.00	100%	\$158.00
	353	Supervisory Equip installed	\$4,452.00	\$0.00	\$4,452.00	100%	\$4,452.00
	353	Additional charges for above	\$1,230.00	\$0.00	\$1,230.00	100%	\$1,230.00
	353	Capitalized Overheads for above	\$248.00	\$0.00	\$248.00	100%	\$248.00
	353	Underground system improvement	\$5,667.99	\$0.00	\$5,667.99	100%	\$5,667.99
	353	Install of a 13.8kv Bus between #6 & Bus #2	\$58,844.30	\$0.00	\$58,844.30	100%	\$58,844.30
	353	Replace Lead Calcium Battery	\$7,965.19	\$0.00	\$7,965.19	100%	\$7,965.19
	353	Purch Power Supply for Tone Equipment	\$413.74	\$0.00	\$413.74	100%	\$413.74
<b>Subtotal</b>							<b>\$333,455.99</b>
<b>Electric Station Line</b>							
	356	Trans Line from Electric Station	\$5,604.00	\$0.00	\$5,604.00	100%	\$5,604.00
	356	Trans Line from Electric Station	\$15,011.00	\$0.00	\$15,011.00	100%	\$15,011.00
	355	Trans Line from Electric Station Allocation (Estimated)	\$36,342.86	\$0.00	\$36,342.86	100%	\$36,342.86
<b>Subtotal</b>							<b>\$56,957.86</b>
<b>Land</b>							
	350	Cost of Land purchased from New England Power Co	\$6,663.35	\$0.00	\$6,663.35	100%	\$6,663.35
	350	Acquisition Costs for land at Flagg Pond & Beech St. Subs	\$817.70	\$0.00	\$817.70	100%	\$817.70
	350	Transmission Land #01, 02 & 06 Lines	\$78,545.00	\$0.00	\$78,545.00	100%	\$78,545.00
	350	Transmission ROW #01, 02 & 06 Lines	\$144,391.00	\$0.00	\$144,391.00	100%	\$144,391.00
	351	Clearing on Line #01 Flagg Pond to Summer St. S/S	\$6,654.38	\$0.00	\$6,654.38	100%	\$6,654.38
	351	Install gate at both ends of 01 & 02 tap	\$1,381.92	\$0.00	\$1,381.92	100%	\$1,381.92
	350	Off Summer St. Fitchburg	\$4,797.00	\$0.00	\$4,797.00	100%	\$4,797.00
	350	Crushed Stone for Summer St. S/S yard	\$2,890.00	\$0.00	\$2,890.00	100%	\$2,890.00
	350	Grading for Summer St. S/S	\$528.00	\$0.00	\$528.00	100%	\$528.00



DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 65 of 71

**Detail of Transmission Plant as of 12/31/97  
(Per FERC's Seven Part T&D Facility Test)**

<u>Category</u>	<u>Account</u>	<u>Description</u>	<u>Amount</u>	<u>Amount</u>	<u>Total Plant</u>	<u>Transmission</u>	<u>Transmission</u>
	<u>Subtotal</u>		<u>Added</u>	<u>Retired</u>	<u>Balance</u>	<u>Percent</u>	<u>Plant Balance</u>
							<b>\$246,668.35</b>
<b>NEPCo Acquisition Cost</b>							
	352		\$4,018.08			61% *	\$2,441.52
	353		\$122,600.09			61% *	\$74,495.91
							<b>\$76,937.43</b>
<b>JOINT OWNED UNITS</b>							
	352		\$11,383.84			100%	\$11,383.84
Millstone III	353		\$50,261.66			100%	\$50,261.66
	355		\$13,202.36			100%	\$13,202.36
	356		\$3,302.94			100%	\$3,302.94
	352		\$0.00			100%	\$0.00
Wyman#4	353		\$4,636.19			100%	\$4,636.19
	352		\$0.00			100%	\$0.00
New Haven	353		\$55,704.98			100%	\$55,704.98
							<b>\$138,491.97</b>
<b>Grand Total</b>						<b>Total</b>	<b>\$5,815,064</b>

\* 61% is the ratio of transmission plant as defined in this workpaper,  
to transmission plant as defined in Dec 31, 1997 FERC Form 1 filing, page 207 line 53.  
NEPCo acquisition costs are being allocated in the same percentage as  
facilities being allocated between transmission and distribution.

**Worksheet 1**  
**Detail of PTF Transmission Plant as of 12/31/97**  
**Incorporating effects of reclassification of PTF to Non-PTF effective June 1, 1999**

Incorporating effects of reclassification of PTF to Non-PTF Assets			Amount	Amount	Total Plant	PTF	PTF
Category	Account	Description	Added	Retired	Balance	Percent	Plant Balance
Flagg Pond	352	Structures and Improvements	\$24,143.99	\$0.00	\$24,143.99	100%	\$24,143.99
	353	Purchased from New England Power on 6/1/77	\$1,272,305.18	\$0.00	\$1,272,305.18 (1)		\$414,449.05
	353	Transfer acquisition costs to acct 2-353-99	(\$84,274.29)	\$0.00	(\$84,274.29) (2)		(\$27,452.06)
	353	Retire 2 600 amp OCB plus installation	\$0.00	\$21,975.62	(\$21,975.62)	100%	(\$21,975.62)
	353	Install 115kv breaker status for REMVEC	\$14,556.40	\$0.00	\$14,556.40	100%	\$14,556.40
	353	See F-2172	\$937,758.94	\$12,809.54	\$924,949.40	100%	\$924,949.40
	353	Install 2 1000w Lucalox Floodlights near control shack	\$2,938.12	\$0.00	\$2,938.12	100%	\$2,938.12
	353	Install Potential Transformers	\$21,174.57	\$0.00	\$21,174.57	100%	\$21,174.57
	353	Retire PT	\$0.00	\$4,628.41	(\$4,628.41)	100%	(\$4,628.41)
	353	Metering	\$41,916.83	\$0.00	\$41,916.83	100%	\$41,916.83
	353	Install 2016 of 4/0 st bare copper	\$1,868.89	\$0.00	\$1,868.89	100%	\$1,868.89
	353	Install 50' of 2" PVC Pipe	\$4,033.47	\$0.00	\$4,033.47	100%	\$4,033.47
	353	785' of 4/0 at 600 volt	\$0.00	\$1,198.75	(\$1,198.75)	100%	(\$1,198.75)
	353	50' of 4/0 wire	\$0.00	\$31.55	(\$31.55)	100%	(\$31.55)
	353	760' of 4/0 hard drawn wire	\$0.00	\$1,310.88	(\$1,310.88)	100%	(\$1,310.88)
	353	50' of 4/0 wire	\$0.00	\$106.74	(\$106.74)	100%	(\$106.74)
	353	965' of 4/0 wire	\$0.00	\$2,876.75	(\$2,876.75)	100%	(\$2,876.75)
	353	50' of 2" PVC Pipe	\$0.00	\$164.50	(\$164.50)	100%	(\$164.50)
	353	Data Star Recorders	\$3,780.00	\$0.00	\$3,780.00	100%	\$3,780.00
	353	Installed Data Star Recorder Software Level #2	\$750.00	\$0.00	\$750.00	100%	\$750.00
	353	Payroll & overheads for above install	\$1,014.38	\$0.00	\$1,014.38	100%	\$1,014.38
	353	Recorder Tape System GE	\$0.00	\$5,300.00	(\$5,300.00)	100%	(\$5,300.00)
	353	Universal Mag Tape Cartridges	\$0.00	\$637.20	(\$637.20)	100%	(\$637.20)
	353	Watt/Var Transducer	\$5,950.00	\$0.00	\$5,950.00	100%	\$5,950.00
	353	Volt Transducer	\$185.00	\$0.00	\$185.00	100%	\$185.00
	353	Shipping & Handling	\$34.92	\$0.00	\$34.92	100%	\$34.92
	353	500' 4/C #12 AWG Control Cable	\$1,142.10	\$0.00	\$1,142.10	100%	\$1,142.10
	353	50' 1/2 watt precision resistors	\$41.39	\$0.00	\$41.39	100%	\$41.39
	353	350' T&B Stakon Terminals	\$86.45	\$0.00	\$86.45	100%	\$86.45
	353	69' Copper Wire	\$10.35	\$0.00	\$10.35	100%	\$10.35
	353	Cable Tie	\$17.55	\$0.00	\$17.55	100%	\$17.55
	353	Misc Parts	\$52.76	\$0.00	\$52.76	100%	\$52.76
	353	Labor for fixing recorder	\$368.80	\$0.00	\$368.80	100%	\$368.80
	353	Labor for wiring	\$124.20	\$0.00	\$124.20	100%	\$124.20
	353	Install GETEC Telemetry to REMVAC (Liabilities)	\$422.31	\$0.00	\$422.31	100%	\$422.31
	353	Overheads	\$6,638.54	\$0.00	\$6,638.54	100%	\$6,638.54
	353	Payroll	\$8,030.61	\$0.00	\$8,030.61	100%	\$8,030.61
	353	Bristol DPC 333010A computer	\$4,230.71	\$0.00	\$4,230.71	100%	\$4,230.71
	353	Bristol SLC 371140A Recorders	\$5,771.41	\$0.00	\$5,771.41	100%	\$5,771.41
	353	Bristol Power Supply	\$515.05	\$0.00	\$515.05	100%	\$515.05
	353	Labor to set up Bristol	\$2,355.00	\$0.00	\$2,355.00	100%	\$2,355.00
	353	Spare Interrupter Assembly for 115kv Circuit breaker	\$9,512.00	\$0.00	\$9,512.00	100%	\$9,512.00
	353	Install & purch EM-GRO Air Compressor	\$1,273.97	\$0.00	\$1,273.97	100%	\$1,273.97
Subtotal							\$1,436,655.76
Land	350	Cost of Land purchased from New England Power Co.	\$6,663.35	\$0.00	\$6,663.35	50%	\$3,331.68
	350	Acquisition Costs for land at Flagg Pond & Beech St. Subs	\$817.70	\$0.00	\$817.70	50%	\$408.85
	Subtotal						\$3,740.53
Grand Total							\$1,440,396.28

## Notes:

- 1) Flagg Pd substation cost in original purchase from NEP split in half for 69kV and PTF 115 kV after removal of transformer cost of \$443,407.08
- 2) Transfer acquisitions costs allocated to transformers, 69kV and PTF 115 kV based on the ratio of NEP Purchase costs in line above.

## WORKPAPER 2

## Fitchburg Gas and Electric Light Company

## 1997 Cost of Capital

## Pursuant to NEPOOL Open Access Transmission Tariff - ATTACHMENT F

	Amount Outstanding 12/31/97	C.O.C.	Weight	Weighted Cost of Capital
Common Stock Equity	37,907,035	11.50%	51.01%	5.87%
Preferred Stock	2,400,886	6.90%	3.23%	0.22%
Long Term Debt (include. due in 1 yr.)	34,000,000	7.60%	45.76%	3.48%
Total	74,307,921			9.57%

## Common Equity

Common Stock	\$22,629,147
Retained Earnings	16,786,861
Capital Stock Expense	(1,507,083)
Misc. Paid in Capital	(1,890)
Total	\$37,907,035

## Preferred Stock \$100 Par

Series	Amount Outstanding 12/31/97	Annual Issuance Expense	Annual Dividend Expense	Total Annual Cost	Effective Cost %
5.125%	1,034,600	0	53,023	53,023	5.13%
8.00%	<u>1,407,000</u>	<u>0</u>	<u>112,560</u>	<u>112,560</u>	<u>8.00%</u>
	2,441,600	0	165,583	165,583	6.78%
Less: Capital Stock Expense	5.125% 12,784				
	8.00% <u>27,930</u>				
Subtotal	40,714				
Total	2,400,886				6.90%

## Long Term Debt

Series	Amount Outstanding 12/31/97	Annual Issuance Expense	Annual Interest Expense	Total Annual Cost	Effective Cost %
12 year Notes, due March 31, 2004	8.55% 15,000,000	8,604	1,282,500	1,291,104	8.61%
30 Year Note, due Nov 30, 2023	6.75% 19,000,000	10,673	1,282,500	1,293,173	6.81%
Total	34,000,000	19,277	2,565,000	2,584,277	7.60%

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 68 of 71

FILED  
OFFICE OF THE SECRETARY  
00 JAN 24 PM 3: 14  
FEDERAL ENERGY  
REGULATORY  
COMMISSION

## Attachment F

# Form of Notice Suitable for Publication In the Federal Register

DTE 02-24/25 (Electric)  
Attachment AG-5-7  
Page 69 of 71

Attachment F

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Fitchburg Gas and Electric Light Company)

Docket No. ER00-\_\_\_\_-000

NOTICE OF FILING

Take notice that on January 21, 2000, Fitchburg Gas and Electric Light Company ("FG&E") tendered for filing changes to the rate set forth in FG&E's Open Access Transmission Tariff, FERC Electric Tariff, First Revised Volume No. 4. The changes reflect a decrease in FG&E's Transmission Plant and corresponding decrease in FG&E's rate for transmission service.

Any person desiring to be heard or to protest such filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, N.E., Room 1-A, Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 C.F.R. §§ 385.211 and 385.214). All such petitions and protests should be filed on or before \_\_\_\_\_, 2000. Protests will be considered by the Commission to determine the appropriate action to be taken, but will not serve to make protestants parties to the proceedings. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

David P. Boergers  
Secretary

## Attachment G

Table showing sales and services

And revenues from

Sales and service

Under the rate schedule to be superseded

And

Under the rate schedule change

**Attachment G**  
**Fitchburg Gas and Electric Light Company**  
**Sales and Services Under Schedule 7, Long-Term Firm and Short-Term Firm Point-to-Point Transmission Service**  
**Sales and Services Under Schedule 8, Non-Firm Point-to-Point Transmission Service**

Customer: 1		Rate \$/kW		Revised Rate \$/kW		Refund Amount	
Schedule 7 Sales		Effective May 13, 1997		Effective June 1, 1999			
Month	kW	Total Bill	Total Bill	Total Bill	Total Bill		
Sep-99	3,335	\$0.72	\$2,400.84	\$0.613	\$2,044.05	\$356.79	\$356.79
Oct-99	3,335	\$0.72	\$2,400.84	\$0.613	\$2,044.05	\$356.79	\$356.79
Nov-99	3,335	\$0.72	\$2,400.84	\$0.613	\$2,044.05	\$356.79	\$356.79
1999 - Total	10,004		\$7,202.52		\$6,132.15		\$1,070.37

### FG&E's Use of System<sup>(1)</sup>

	Schedule 7 Sales	kW	Total Bill	Use of system over(under) charge
P&G-E's Use of System:	Month	Effective May 13, 1997	Effective March 1, 1998	
	Rate \$/kW	Revised Rate \$/kW	Total Bill	

Apr-98	10,000	\$0.720	\$7,200.00	\$0.131	\$1,310.00	\$5,890.00
Apr-98	6,108	\$0.720	\$4,397.70	\$0.131	\$800.14	\$3,597.56
Apr-99	24,000	\$0.720	\$17,280.00	\$0.131	\$3,144.00	\$14,136.00
May-99	2,000	\$0.720	\$1,440.00	\$0.131	\$262.00	\$1,178.00
<b>Totals</b>	<b>42,108</b>		<b>\$30,317.70</b>		<b>\$5,516.14</b>	<b>\$24,801.56</b>

Month	kW	Rates \$/kW		Revised Rate \$/kW		Use of system cover/under charge
		Effective May 13, 1997	Total Bill	Effective June 1, 1999	Total Bill	
Jun-99	38,000	\$0.720	\$27,360.00	\$0.613	\$23,294.00	\$4,066.00
Aug-99	10,000	\$0.720	\$7,200.00	\$0.613	\$6,130.00	\$1,070.00
Sep-98	2,000	\$0.720	\$1,440.00	\$0.613	\$1,226.00	\$214.00
<b>Total</b>	<b>50,000</b>		<b>\$36,000.00</b>		<b>\$30,650.00</b>	<b>\$5,350.00</b>

Schedule 8 Sales		Rate \$/Mwh		Revised Rate \$/Mwh		Use of system	
Month	Mwh	Effective May 13, 1997	Total Bill	Effective March 1, 1998	Total Bill	over/under charge	
Mar-98	195	\$0.740	\$144.30	\$0.134	\$26.13		\$118.17
Apr-98	750	\$0.740	\$555.00	\$0.134	\$100.50		\$454.50
May-98	1,791	\$0.740	\$1,325.34	\$0.134	\$239.99		\$1,085.35
Jun-98	884	\$0.740	\$654.16	\$0.134	\$118.46		\$535.70
Jul-98	399	\$0.740	\$295.26	\$0.134	\$53.47		\$241.79
Sep-98	780	\$0.740	\$577.20	\$0.134	\$104.52		\$472.68
<b>Total</b>	<b>4,799</b>		<b>\$3,551.26</b>		<b>\$643.07</b>		<b>\$2,908.19</b>
<b>Grand Total</b>	<b>96,907</b>		<b>\$69,868.96</b>		<b>\$36,809.20</b>		<b>\$33,059.76</b>

(1) FG&E's use of the System is "imputed revenue".